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14. Economics and Employment

14.1 Introduction

This chapter presents an assessment of the existing economic and employment aspects in the social study area. It draws upon information gathered during household surveys, key informant interviews and focus group discussions along with relevant secondary data. The chapter then goes on to provide an analysis of the potential economic impacts resulting from the construction, operation and decommissioning of the Project. In addition, mitigation measures designed to reduce, remediate or avoid potential impacts are described, and the residual impacts (i.e. impacts after mitigation measures are implemented) presented.

14.1.1 Objectives

The specific objectives of this economics impact assessment are to:

- Describe the national and local economic baseline, including for neighbourhoods in the social study area.
- Identify the potential positive and negative impacts of the Project.
- Develop attainable mitigation measures to enhance positive impacts and reduce or avoid negative impacts.
- Develop management and monitoring measures to be implemented throughout the life of the project.

14.2 Summary Policy Context

See chapter 13 for the policy context.

14.3 Scope and Assessment Methodology

See chapter 13 for the scope and assessment methodology.

14.4 Baseline

This section presents an assessment of the existing economic status and drivers in the social study area. It draws upon information gathered during household surveys, key informant interviews and focus group discussions along with relevant secondary data and considers the activity within economic sectors, new opportunities in the area and household income and expenditure.

14.4.1 National Economic Overview

Turkey is an upper middle income country, with a GDP of US$786 billion, making it the 18th largest economy in the world, ranked behind Indonesia and ahead of the Netherlands[1]. Turkey's economy is increasingly driven by its industry and service sectors. The five largest economic sectors in Turkey in 2012 as measured by their share of GDP, were manufacturing (24.4%), transport, storage and communication (9.9%), wholesale and retail trade (12.7%), financial services (12%), and agriculture (9.0%). However, the agriculture sector still accounts for approximately a quarter of employment in the country[2].

Following a severe financial crisis in 2001, Turkey adopted financial and fiscal reforms as part of an International Monetary Fund (IMF) programme. The reforms brought an era of strong growth - averaging

[1] World Bank. 2012. GDP Ranking Table. Accessed at: http://data.worldbank.org/datacatalog/GDP-ranking-table
[2] http://www.tradingeconomics.com/turkey/employment-in-agriculture-percent-of-total-employment-wb-data.html

more than 6% annually until 2008. Global economic conditions and tighter fiscal policy caused GDP to contract in 2009, however Turkey's well-regulated financial markets and banking system enabled GDP to grow by 9.2% in 2010. Growth dropped to approximately 3% in 2012. Turkey's public sector debt to GDP ratio has fallen to about 40%. Turkey remains dependent on often volatile, short-term investment to finance its large trade deficit[3].

Government Spending in Turkey averaged 2500909.45 TRY from 1998 until 2015, reaching an all-time high of 4310530 TRY in the fourth quarter of 2014[4]. Government revenue was reported at US$189.9 billion in 2014 with expenditure reaching US$209.7 billion.

The export market in Turkey is growing year on year with exports increasing from US$163.6 billion in 2013 to US$176.6 billion in 2014. The main export commodities include apparel, foodstuffs, textiles, metal manufacturers and transport equipment. Imports have decreased in the last couple of years from US$243.4 billion in 2013 to US$240.4 billion in 2014. The main imports into the country include machinery, chemicals, semi-finished goods, fuels, and transport equipment[5].

Turkey's labour market is characterised by low activity and low labour productivity rates, especially among women and youth[6]. In 2011, 50% of the working-age population was in formal employment, which is approximately 20% below the OECD average. Following the global financial crisis, unemployment reached 14% in 2008; however, the unemployment rate in 2011 had fallen to 9.8%, below 10% for the first time since prior to 2008[7]. Of those who were employed in Turkey in 2011, 22.7% were employed in agriculture, 27.2% were employed in industry and 50.1% were employed in the services sector[8].

14.4.2 Provincial economy

Kayseri Province is currently the 18th largest industrial region in the country accounting for approximately 1.5% of the national manufacturing industry. The key sectors in the province include industry, trade, agriculture and animal husbandry. The services sector is the largest employer within Kayseri Province.

14.4.3 Local economy

Agriculture and animal husbandry are the main economic activities in the social study area, and of those employed in the social study area surveyed, approximately 40% are employed in agriculture. The next most common employment is in industry, skilled craftsmanship and trade.

The villages to the south and west of the proposed Project, including Öksüt, Sarıca, Gazi and Zile rely more heavily on animal husbandry. Öksüt and Gazi have a relatively high retired population who live on their state pension. In Tombak, villagers predominantly undertake dry agricultural practices. Villages to the east along the proposed powerline also focus on animal husbandry and, to a lesser extent, agriculture. Many residents are bused to light manufacturing jobs at the Kayseri Organized Industry Region.

Most settlements in the study area reported high amounts of outward migration of young residents who leave for other cities or countries to seek employment. Sarıca and Gömedi reported particularly high amounts as young residents leave to seek employment in painting, shoe making and construction. In Yukarı Develi seasonal migration to other provinces for employment in construction for the summer season is high.

Yukarı Develi is known in the region for animal husbandry, however the sector is in decline in the region due to the withdrawal of government funding for herding livestock.

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[3] Central Intelligence Agency, The World Factbook, May 2013. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/geos/tu.html
[4] http://www.tradingeconomics.com/turkey/government-spending
[5] https://www.cia.gov/library/publications/the-world-factbook/geos/tu.html
[6] http://siteresources.worldbank.org/INTTURKEY/Resources/361616-1144320150009/Labor_Study.pdf
[7] http://www.sgi-network.org/docs/2014/country/SGI2014_Turkey.pdf
[8] http://www.turkstat.gov.tr/PreHaberBultenleri.do?id=15843

Settlements in the north and east of the social study area including Yukarı Develi, Gömedi, Gazi and Yazıbaşı undertake predominantly dry agriculture, while water sources in Zile, Epçe and Sarıca provide for irrigated agriculture. Residents in Tombak and Gömedi villages also include professionals in auto maintenance, carpentry, plastering, tiling and painting.

Employment of women in the social study area is limited, with less than 1% reportedly undertaking formal employment and 64% of women surveyed identifying themselves as housewives or unpaid family or house workers. Most women reported undertaking informal employment in the women's focus group discussions, including childcare, garden agriculture and livestock rearing. Women from Zile and Gazi reported selling animal products at Develi Market when the household produced a surplus.

A summary of each settlement in the social study area is provided below.

Öksüt

Öksüt is a relatively poor village with several households receiving coal aid, support from NGOs, government subsidies or support from neighbours or family. Outward migration of youth has left an aging population, many of whom are retired and live from their pension. The population increases by 15-20 families in the summer who come to work in pea cultivation. Agriculture and animal husbandry are the main sources of income within the village.

Zile

The working age population of Zile fluctuates significantly between seasons. Up to 50% of households leave the village in winter months in search of employment and return in summer to undertake agricultural practices. In summer, 150-300 households migrate to Zile for summer work between May and August. Much of the retired population live in Istanbul and Ankara and only visit the village for 3 months in summer.

The population of Zile has decreased over the last five years due to high levels of outward migration of the youth due to a lack of economic opportunities locally.

Grapes, sugar beet, clover and barley are grown commercially within the village, with most other farming undertaken on a subsistence basis.

Tourism surrounding the Acısu spring water is an important economic activity in the village with between 150-300 families traveling to Zile in July and August to collect water. Each family stays for between 3-4 days and a restaurant has been established in the village to serve these tourists and local residents.

Gazi

Like the neighbouring villages, Gazi's population fluctuates between winter and summer. Up to 40% of the working age population leave in winter in pursuit of employment. The majority of the youth have moved permanently to larger cities. The majority of the population is retired and live off their retirement pension. Several of these households are still engaged in animal husbandry and agricultural activities on a subsistence basis.

Sarıca

Residents in Sarıca began undertaking animal husbandry practices in the last 5 years, prior to this they produced dairy goods. Due to the poor returns on dairy products the villagers ceased dairy production and took up animal trading following support from the government.

Sugar beet is grown commercially and between 50-100 families migrate to the village between April and October to work in sugar beet harvesting.

Out migration of the youth of the village in pursuit of employment in Istanbul and Ankara is a key issue for the settlement.

Tombak

Tombak has seen a significant amount of out migration of the young male population, who move to other parts of the province or cities to work in manufacturing. Around 25% of the working age population leave the village in winter and return in summer for agricultural activities. Farming in the village is a mix of agriculture and animal husbandry, all of which is undertaken on a subsistence basis and no commercial farming practices are undertaken. Around 15% of the population receive support from the government, NGOs or neighbours and family.

Yukarı Develi

The main source of economic income in Yukarı Develi is dry farming and animal husbandry activities, although animal husbandry has declined since government funding has reduced and grazing land has become scarcer. Farming activities are predominantly undertaken on a subsistence basis, with only 3-4 households engaging in the sale of their goods and animals. Irrigated agriculture is not practiced in the neighbourhood. There are few people from the settlement working at Saray Carpet factory in Develi and approximately 10 people who are working as drivers. Similarly to other settlements in the social study area, there are approximately 30 seasonal workers who migrate to different provinces for 4 to 6 months to work in the construction sector, especially during the summer season.

Yazıbaşı

The women's focus group discussion reported that majority of the population are elderly and there are more than 70 widowed women in the village. The men's focus group discussion reported that the majority of the young population (except for 3-5 young farmers) have migrated to other provinces due to loss of grazing land. The total number of households in the village has reduced from 750 to 300 in the last 10 years. Both animal husbandry and agricultural production is conducted in Yazıbaşı neighbourhood. There are approximately 50 households engaged in dry farming with roughly the same number engaged in bovine animal husbandry. Approximately 15 households come to the village in summer for seasonal work harvesting pumpkin crops.

Only one household is engaged in the transportation sector. There are also a limited number of craftsmen in the neighbourhood who are professionals in auto maintenance, carpentry and construction works.

Gömedi

Like most of the settlements in the social study area, Gömedi has experienced a significant amount of outward migration. Permanent outward migration of youth seeking economic opportunities is common. Approximately 25% of the population leave the village in winter for employment. Dry agriculture is the main economic activity in the village, following by bovine animal husbandry and bee keeping. Most farming activities are undertaken on a subsistence basis with any surplus produce being sold at Develi market.

Epçe

Epçe's population has decreased by around 14% since 2000. Outward migration of the youth in pursuit of employment is high. Epçe's economy is reliant on farming, with 80% of households engaged in animal husbandry. Livestock rearing and trading is common in the village, along with the sale of milk to a number of merchants. Households undertake subsistence dry and irrigated agricultural practices.

Sindelhöyük

With 6,000 people, Sindelhöyük has the largest population of the settlement surrounding Develi. There is no migration in or out of the settlement, but some 50 households only reside locally in summer months. The main economic activities are animal husbandry and agriculture. Approximately 300 people travel to the Kayseri Organised Industrial Region where employment is available in textile, stove, sofa upholstery and other light manufacturing factories.

Çayırözü

Çayırözü has no reported migration in or out aside from 30-40 households who return during summer holiday months. There are no seasonal agricultural workers coming to the settlement. The main livelihood is animal husbandry and agriculture. Irrigated fields are commonly used for melon, silage corn, clover and other animal feed. There is some salaried employment at other factories in the Kayseri Province, but not in the settlement itself.

Soysallı

Soysallı has no reported migration other than summer residents who come for holidays. Animal husbandry, particularly cattle rearing, is the main livelihood. Residents travel to the Kayseri Organised Industry Region where people have employment in welding and sofa upholstery. People are also employed in a brick factory close to the village and owned by a resident. Approximately 10 people work at this facility.

14.4.4 Inflation

Inflation has been volatile in Turkey over the last 5 years with a year-on-year increase in inflation since 2012 (6.16%) to 8.9% in mid-2015. The increase is led by price gains in the transportation and housing sectors, along with high food prices. There is unlikely to be a significant shift toward the central bank's long-term inflation target of 5%[9].

Inflation rates for housing were explored through key informant interviews. Over the last five years, costs for accommodation have risen at 10-15% per year. These rates are even higher during summer months when relatives and visitors can come to the area[10].

14.5 Educational Achievement and Employment

15.1.1 Educational Attainment

Provincial and District Levels

The population distribution of Kayseri Province and Develi District by education level and gender is provided in Table 14-1.

Table 14-1: Population Statistics by Education Level and Gender in Kayseri and Develi

	Kayseri				Develi			
	Total		Male	Female	Total		Male	Female
	Number	Percentage (%)			Number	Percentage (%)		
Illiterate	35,978	3.0	4,758	31,220	3,672	6.3	518	3,154
Literate Only	142,112	12.0	60,818	81,294	7,200	12.3	3,189	4,011
Primary School Graduate	344,403	29.2	148,172	196,231	21,666	37.0	10,450	11,216
K-8 Education	187,325	15.9	106,325	81,000	10,139	17.3	5,655	4,484
Secondary School Graduate	103,640	8.8	59,053	44,587	4,392	7.5	2,501	1,891
High School Graduate	218,840	18.5	126,997	91,843	6,875	11.7	4,305	2,570

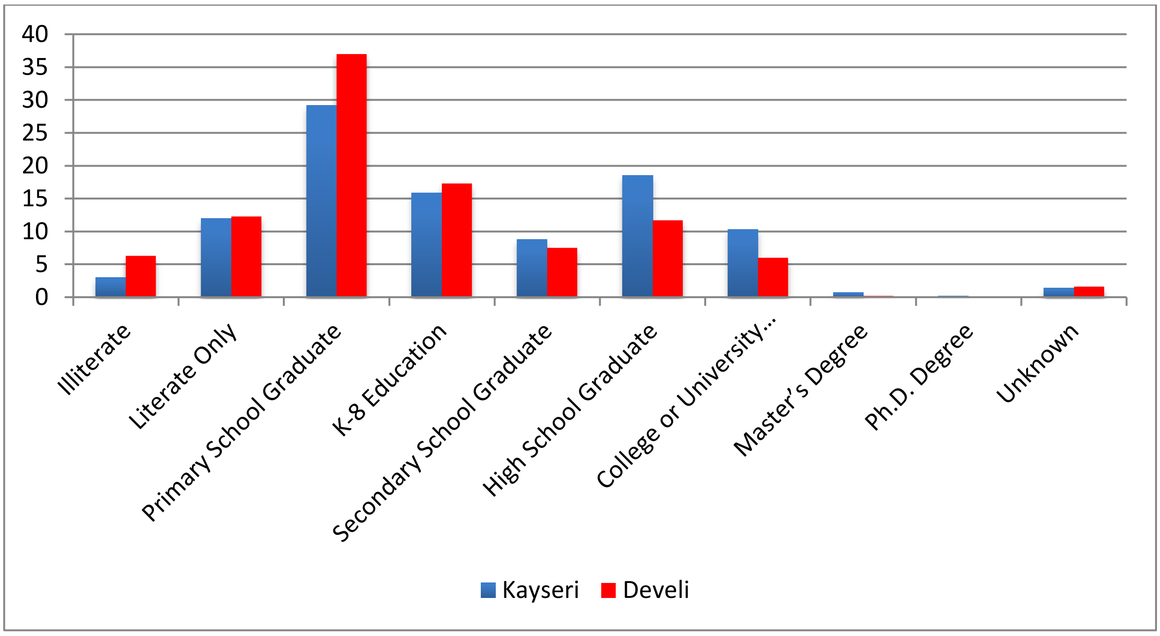
[9] http://www.centralbanknews.info/p/inflation-targets.html
[10] Key information interview, 16 February 2016.

	Kayseri				Develi			
	Total		Male	Female	Total		Male	Female
	Number	Percentage (%)			Number	Percentage (%)		
College or University Graduate	121,314	10.3	70,243	51,071	3,520	6.0	2,183	1,337
Master's Degree	8,638	0.7	5,140	3,498	135	0.2	82	53
Ph.D. Degree	2,552	0.2	1,613	939	26	0.0	11	15
Unknown	16,191	1.4	6,824	9,367	953	1.6	487	466
Total	**1,180,993**	**100.0**	**589,943**	**591,050**	**58,578**	**100.0**	**29,381**	**29,197**

Source: TurkStat, Educational Statistics 2014
Note: *Data refers to people above the age of 6*

Provincial and District level data is consistent, with key exceptions of a greater number of primary school graduates but lower high school graduates from Develi compared to Kayseri, as shown in Figure 14-1. This figure shows that the average educational profile in both Kayseri and Develi is a primary school graduate.

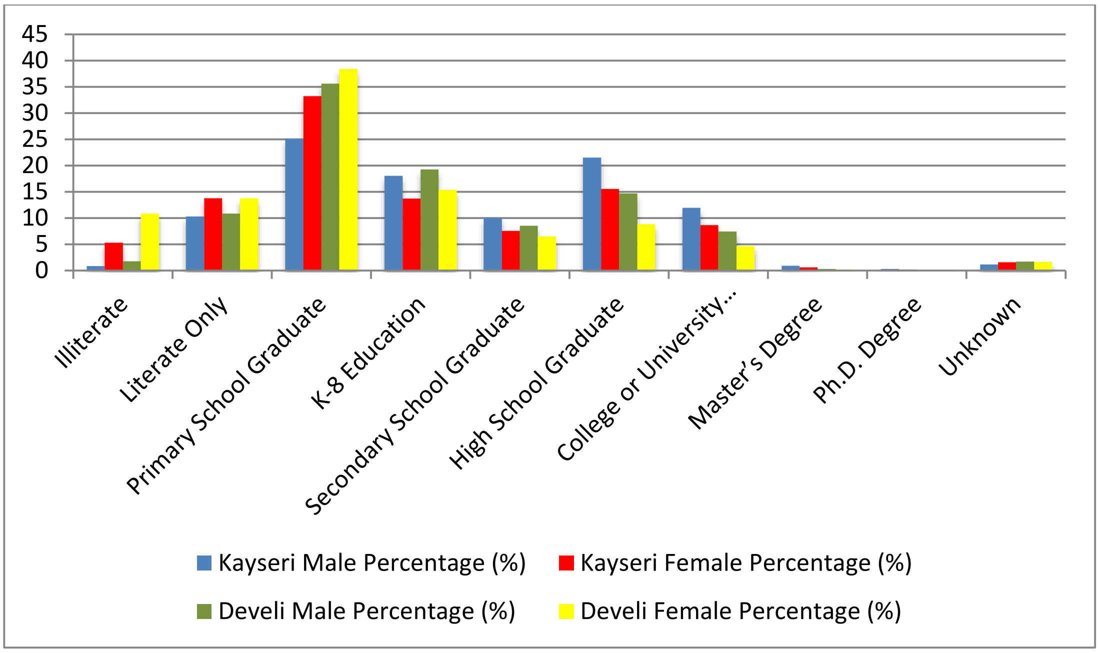
Figure 14-1: **Provincial *and District Education Levels (%)***[11]



However, investigation of this data by gender reveals a strong bias towards education of the male rather than the female population, which is more pronounced at the District level compared to the Provincial level, as shown in Figure 14-2.

[11] Source: TurkStat, Educational Statistics 2014 (*Data refers to people above the age of 6)*

Figure 14-2: Educational Attainment by Gender (%)[12]



In Kayseri, 35,978 individuals, or 3% of the population above 6 years of age are illiterate, while 142,112 individuals (12%) is functionally literate (i.e. without attending school). The majority of the illiterate population (86% or 31,220 individuals) is female. Primary school graduates comprise 29% of the population above 6 years of age, while 18% are high school graduates.

In Develi, 6.3% of the population above 6 years are illiterate while 12.3% is functionally literate. The majority of the illiterate population (85.9%) is female. Primary school graduate account for 37% of the population above 6 years while high school graduates account for 11.7%.

In total, 3,681 individuals in Develi District have college, university, masters' or PhD degrees (a total 6% of the population). Of the 26 individuals with a PhD, 15 are female, the only category above secondary school level in which educational attainment of the female population exceeds that of the males.

Neighbourhood Level

The household surveys were conducted in Zile and Öksüt neighbourhoods. It was clear during surveying that educational attainment of all household members were not well known, for example, one household mentioned that a child aged between 0-4 is registered to primary school, which is very unlikely as primary school commences at age 5. Further, the 'other' category referred to those surveyed who are disabled and unable to attend school (2 people) and one individual who refused to attend school.

Overall the data shows that the education level of the population decreases as the population gets older. This indicates that current schooling rates are higher than previous years.

The majority of the illiterate population who have never attended school are composed of people who are aged 65 and above. This is can be explained by the inadequate educational services and economic potential of the families to send their children to schools at that time. However, there are additionally a small number of young people aged between 20-24 who are illiterate.

Results of household surveys in Zile and Öksüt provide some indicative trends for education in the rural settlements near the mine. There is an increase in the number of female graduates and an indication

[12] Source: TurkStat, Educational Statistics 2014 (*Data refers to people above the age of 6)*

that there is an increased focus on girls completing education milestones in the neighbourhoods This was also reported through Baseline research, where it was reported that there has been greater female participation in rural areas, particularly over the past five years.[13]

In both Zile and Öksüt, less than 10% of the population reports having a tertiary education and just under 30% have completed their secondary schooling.

15.1.2 Employment and Labour Participation

National Level

Labour force

According to the Labour Force Statistics of TurkStat (April 2015), the number of employed people aged 15 years and over reached 26,638,000. This included an increase from the previous year of 444,000 people. The employment rate was 46.2 %, with an increase of 0.1 % over 2014.

Employment in agriculture at the national level decreased to 67,000 people, while non-agricultural employment increased to 511,000 people over the same 12-month period to April 2015. The services sector employed just over half of the labour force nationally during this period, with sectoral employment as follows:

- Services (52.1%, up 1.2% from the previous year).
- Agriculture (20.7%, down 0.6%).
- Industry (20.0%, down by 0.5%).
- Construction (7.2%, down 0.1%).

The national Labour Force[14] reached 29,459,000 people in April 2015, an increase of 686,000 from the previous year. The Labour Force Participation Rate (LFPR)[15] reached 51.1 % in April 2015, with an overall increase of 0.4 % over the previous year. The LFPR for males was 71.2 %, with a 0.1 % increase from the previous year, while it was 31.4 % for females, with a 0.7 % increase from the previous year.

One third of the working population undertook their roles without any social security relating to their primary job (33.3% %, with a 1.5 % decrease from the previous year).

The Turkish Employment Agency collects data on the Turkish labour force of 15 years of age and above. All data presented in this section, including labour force by age and education levels, is sourced from Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014.

Approximately two thirds of the labour force is male to one third female (Table 14-2), while Figure 14-3 shows that the age category of 25-29 years old has the highest number of registered labour for both for women and men, and a consistent two-thirds to one-third male to female ratio across all age categories.

Table 14-2: Turkish Labour Force (2014), number and gender[16]

	Male	Female	% Male	% Female
15 - 19	62,745	39,284	2.1	2.2
20 -24	477,985	349,344	15.8	19.2
25 -29	696,099	423,535	23.0	23.3
30 - 34	581,729	320,091	19.2	17.6
35-39	450,870	272,643	14.9	15.0

[13] Baseline research – Develi Education Key Informant Interview, December 2014
[14] The labour force (the sum of employed plus unemployed) is so defined as to be conceptually equivalent to the pool of labour available for the production of economic goods and services.
[15] The labour force participation rate for any group within the population is the labour force component of that group, expressed as a percentage of the total population in that group (the sum of the labour force component and those people neither working nor looking for work).
[16] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

	Male	Female	% Male	% Female
40 - 44	326,211	209,657	10.8	11.6
45-49	233,174	116,859	7.7	6.4
50-54	119,766	57,882	4.0	3.2
55-59	51,014	19,597	1.7	1.1
60-64	17,407	4,763	0.6	0.3
65+	7,155	1,401	0.2	0.1
Total	**3,024,155**	**1,815,056**	**100.0**	**100.0**

***Figure 14-3: Turkish Labour Force by Age, 2014*[17]**

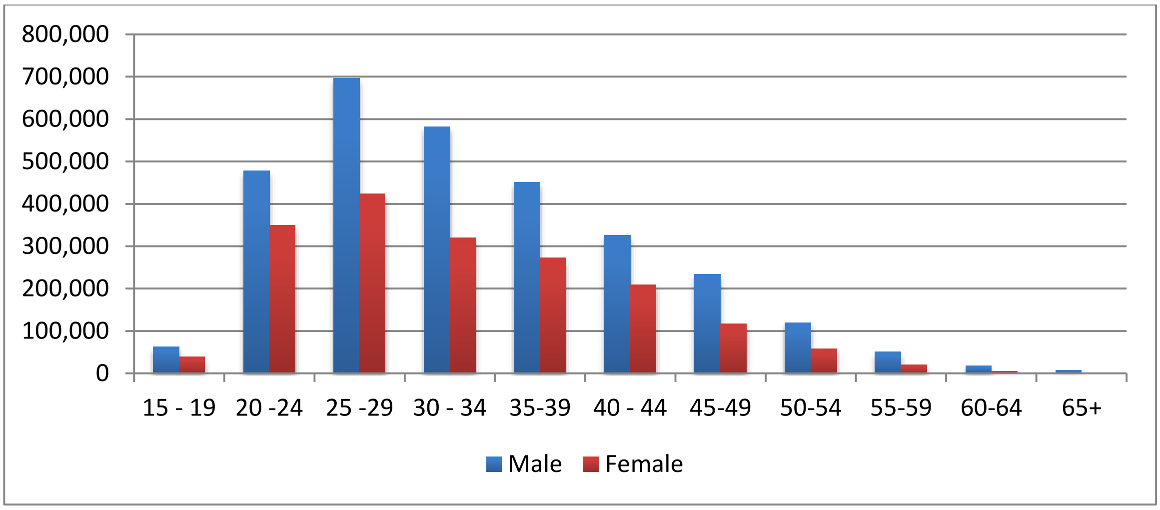


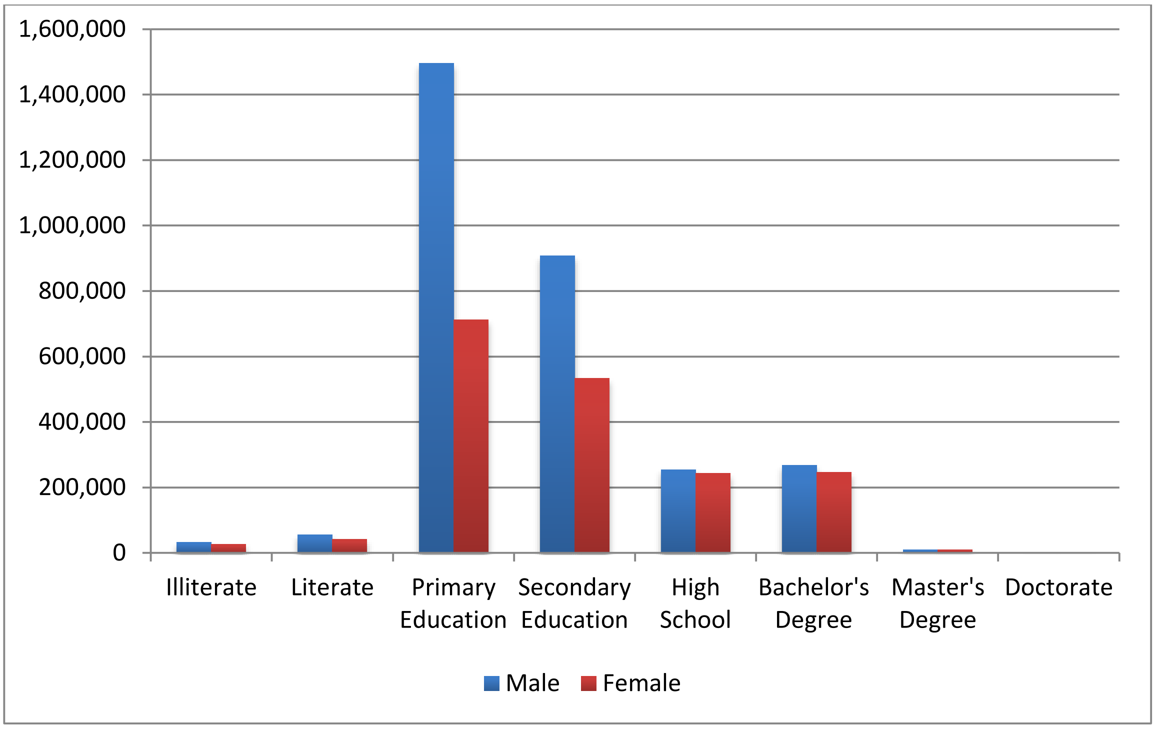
Table 14-3 and Figure 14-4 represents the distribution of the Turkish labour force by educational attainment of the population aged 15 and above. Consistent with neighbourhood data presented above, the majority of the national level labour force is comprised of primary school graduates (45.6%) and male (30.9%), followed by secondary school graduates (29.8%) and again male population (18.8%).

***Table 14-3: Turkish Labour Force Distribution (2014) by Educational Attainment*[18]**

	Male	Female	% Male	% Female
Illiterate	32,673	27,034	0.7	0.6
Literate	55,512	41,746	1.1	0.9
Primary Education	1,496,697	713,447	30.9	14.7
Secondary Education	907,457	532,867	18.8	11.0
High School	254,035	243,501	5.2	5.0
Bachelor's Degree	268,074	246,256	5.5	5.1
Master's Degree	9,302	9,936	0.2	0.2
Doctorate	405	269	0.0	0.0
Total	3,024,155	1,815,056	62.5	37.5

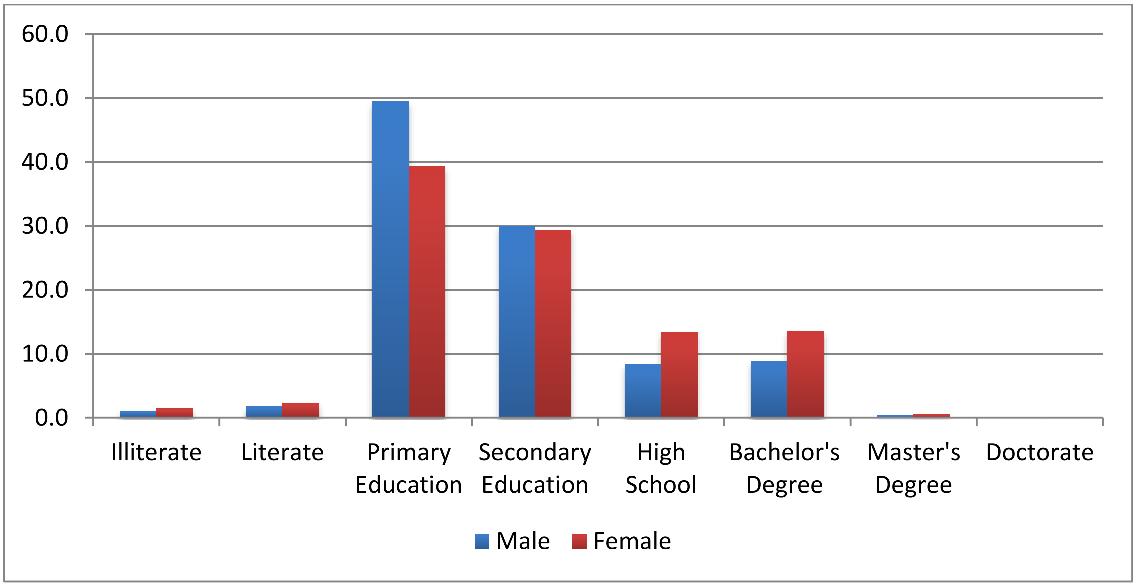
[17] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014
[18] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

Figure 14-4: Turkish Labour Force Distribution (2014) by Educational Attainment



The following Figure 14-5 indicates the educational attainment of the male labour force as a percentage of the male labour force, and the same for females. This shows that of the male labour force, there are more men than women with primary and secondary education, while there are a greater proportion of women than men with high school and tertiary levels of education. So while the total number of men in the labour force have higher education attainment compared to women, the proportion of the female labour force that has progressed to higher levels of education is greater than that of men.

Figure 14-5: Educational Attainment of the Turkish Workforce by Gender[19]



[19] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

Unemployment

The number of unemployed people aged 15 years and over has reached 2,821,000 (9.6%) nationally as of April 2015, which is a 242,000 (0.6%) person increase from the previous year. In 2014 youth unemployment (the 15–24 year old age category) was 17%, an increase of 1.5% from the previous year, while unemployment in the working age population (age 15–64 years) was 9.8%, up 0.7% from the previous year.

The distribution of the registered unemployed population of Turkey by age group is provided in Table 14-4 and Figure 14-6. There is a higher representation of younger populations in unemployment data; the majority of the unemployed population is generated by the age group of 25-29 (22.4%), followed by the 20-24 age group at 17.7%. The majority of the registered unemployed population is comprised of males (59.4%).

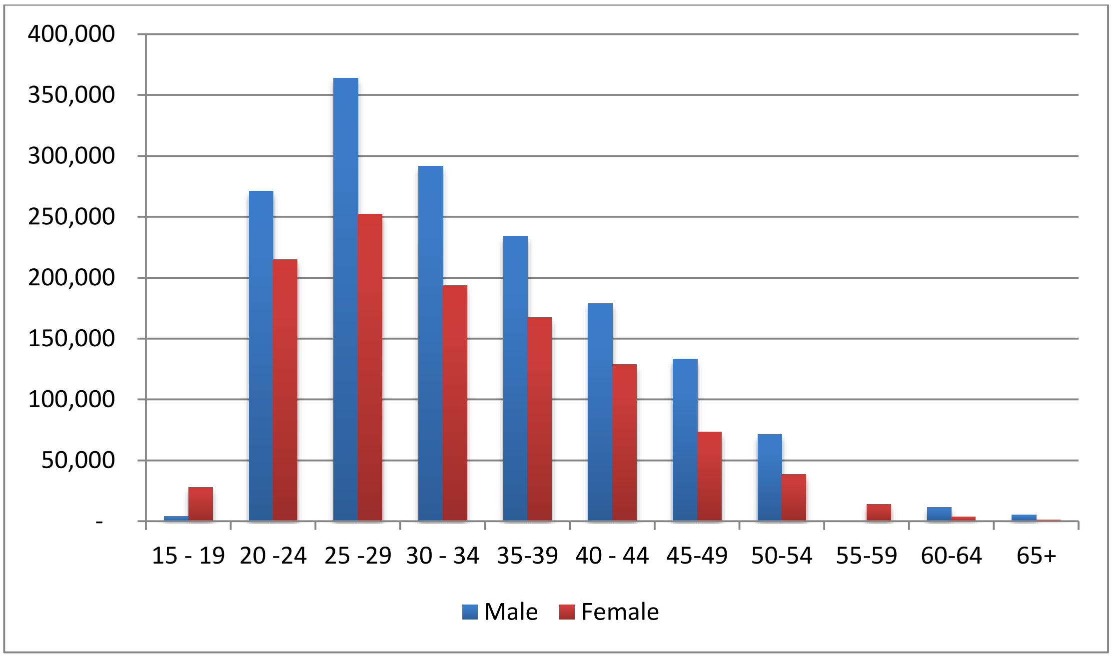
Table 14-4: Turkish Unemployed (2014) by Age and Gender[20]

	Male	Female	% Male	% Female
15-19	4,316	27,827	0.2	1.0
20-24	270,946	215,122	9.9	7.8
25-29	363,939	252,243	13.2	9.2
30-34	291,582	193,525	10.6	7.0
35-39	233,912	167,268	8.5	6.1
40-44	178,632	128,808	6.5	4.7
45-49	133,283	73,343	4.9	2.7
50-54	71,079	38,305	2.6	1.4
55-59	318	13,568	0.0	0.5
60-64	11,544	3,541	0.4	0.1
65+	5,222	1,173	0.2	0.0
Total	**1,633,255**	**1,114,723**	**59.4**	**40.6**

The following Figure 14-6 indicates the same trends between unemployed men and women by age. However, of unemployed men, just over 50 % are in the 20–35 year age group, while this figure is closer to 60% for women in the same age group.

[20] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

Figure 14-6: National Registered Unemployment (2014) by Age[21]



The registered Turkish unemployed population is presented by educational attainment in Table 14-5 and Figure 14-7. The majority of the unemployed population are primary school graduates (46.1%), followed by the secondary school graduates (28.2%).

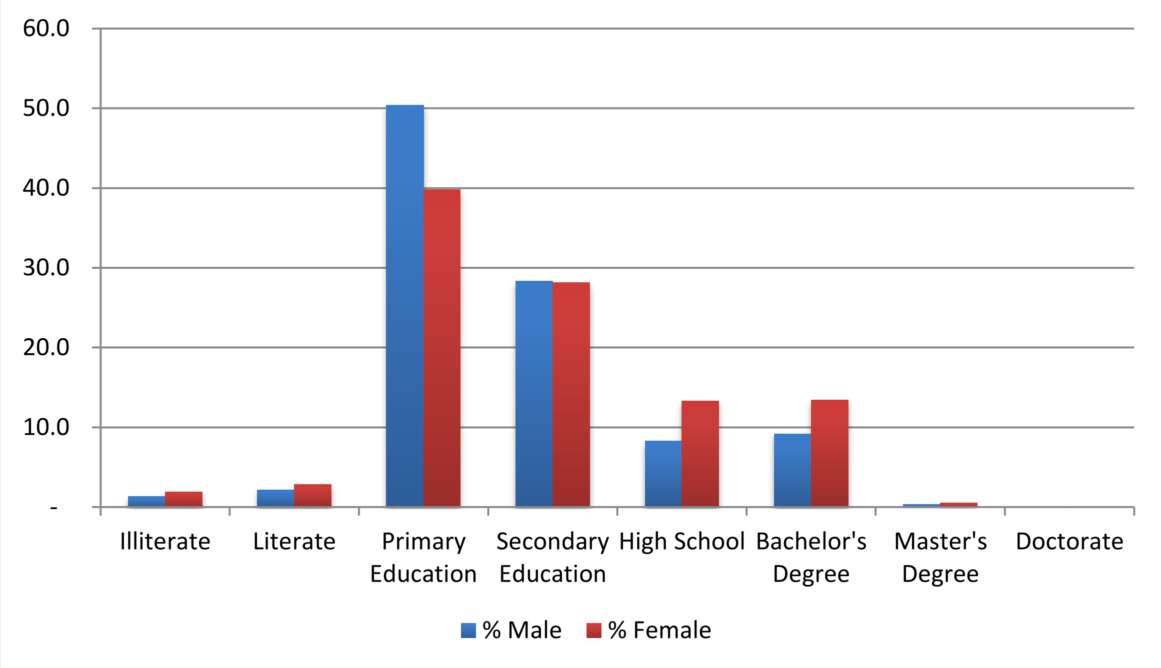
Table 14-5. National Registered Unemployed (2014) by Educational Attainment[22]

	Male	Female	% Male	% Female
Illiterate	21,489	21,084	1.3	1.9
Literate	34,959	31,579	2.1	2.8
Primary Education	823,422	443,699	50.4	39.8
Secondary Education	462,377	313,757	28.3	28.1
High School	135,412	148,648	8.3	13.3
Bachelor's Degree	150,178	149,836	9.2	13.4
Master's Degree	5,176	5,935	0.3	0.5
Doctorate	242	185	0.0	0.0
Total	**1,633,255**	**1,114,723**	**100.0**	**100.0**

Further, Figure 14-7 shows that half of the total unemployed population are males with primary school education. Women comprise a greater proportion of the unemployed at high school levels of education attainment and above, despite (as shown in Figure 14-6 above) that there are approximately the same number of women as men in the labour force with these level of education, suggesting wider barriers to women's participation in the workforce compared to males with the same education.

[21] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014
[22] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

Figure 14-7: National Unemployment Distribution (2014) by Educational Attainment[23]



Provincial Level

Labour in Kayseri is increasingly engaged in industry of the Kayseri Free Zone, currently employing 3,879 people[24]. The Zone was established in 1998 following the introduction of economic liberalisation policies to promote exports of goods and services in the region and now houses more than 94 companies with an investment of US$140 million, and therein the main business activities include: production, trading, warehouse management, mounting and demounting, assembly-disassembly, merchandising, maintenance and repair, engineering workshops, office and workplace rental, packing-repacking, banking and insurance, leasing, labelling and exhibition facilities.[25]

This hub is the result of a shift across Anatolia. Small scale merchant traders have grown into major national industrialists, in part due to a favourable policy environment for small and medium sized enterprises (SMEs), and an approach that favours reinvestment into Provincial businesses, common among the 'Anatolian Tiger' economies[26]. However, these major industrialists cite a difficulty in finding qualified labour: attracting the educated and skilled workforce to Kayseri challenging compared to larger, more cosmopolitan settings such as Istanbul and Ankara, and most of the migrant workforce coming to the area have no skills or special training[27].

Trends in Kayseri are broadly consistent with that at the national level. The statistical data presented in this section is from 2014, sourced from the Statistical Yearbook of the Turkish Employment Organization (İŞKUR).

Labour Force

Table 14-6 and Figure 14-8 indicate that the majority of Kayseri's registered labour force is comprised of males in the 25–29 age group (16.6%) and the registered female labour force reaches to its highest

23 Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014
24 http://www.kayser.com.tr/en/hakkimizda.php
25 http://www.kayser.com.tr/en/nasil-yararlanilir.php
26 The expression used to define the phenomenon of a number of cities in Turkey, including Kayseri, which have displayed dramatic growth since the 1980s, as well as to define a new type of Turkish entrepreneur rising in prominence and who can often be traced back to the cities in question and who generally rose from the status of SMEs. (Anatolian Tigers or Islamic Capital: Prospects and Challenges, Demir, Acar, Toprak, Middle Eastern Studies, 40:6:2004)
27 Kayseri: Eye of the Anatolian Tiger, 22 Feb 2007, Ankara Cable (https://wikileaks.org/plusd/cables/07ANKARA385_a.html)

proportion with 8.8% in this same age group. The total number of registered labour force (over 15 years of age) in Kayseri is 72,884. Approximately two thirds of this labour force is male (67.8%).

Table 14-6: Kayseri Registered Labour Force (2014) by Age Group[28]

	Male	Female	% Male	% Female
15-19	1,237	456	1.7	0.6
20-24	8,539	4,950	11.7	6.8
25-29	12,081	6,375	16.6	8.8
30-34	9,767	4,252	13.4	5.8
35-39	7,007	3,184	9.6	4.4
40-44	4,617	2,273	6.3	3.1
45-49	3,439	1,161	4.7	1.6
50-54	1,735	566	2.4	0.8
55-59	700	195	1.0	0.3
60-64	204	37	0.3	0.1
65+	62	7	0.1	0.0
Total	**49,388**	**23,456**	**67.8**	**32.2**

Figure 14-8 shows that although two thirds of the workforce is male, the same trends are indicated between males and females across age categories. Approximately two thirds of the workforce of both the male (62%) and female (66%) labour force can be found in the 20–34 year age brackets.

Figure 14-8: Kayseri Labour Force (2014) by Age Group[29]

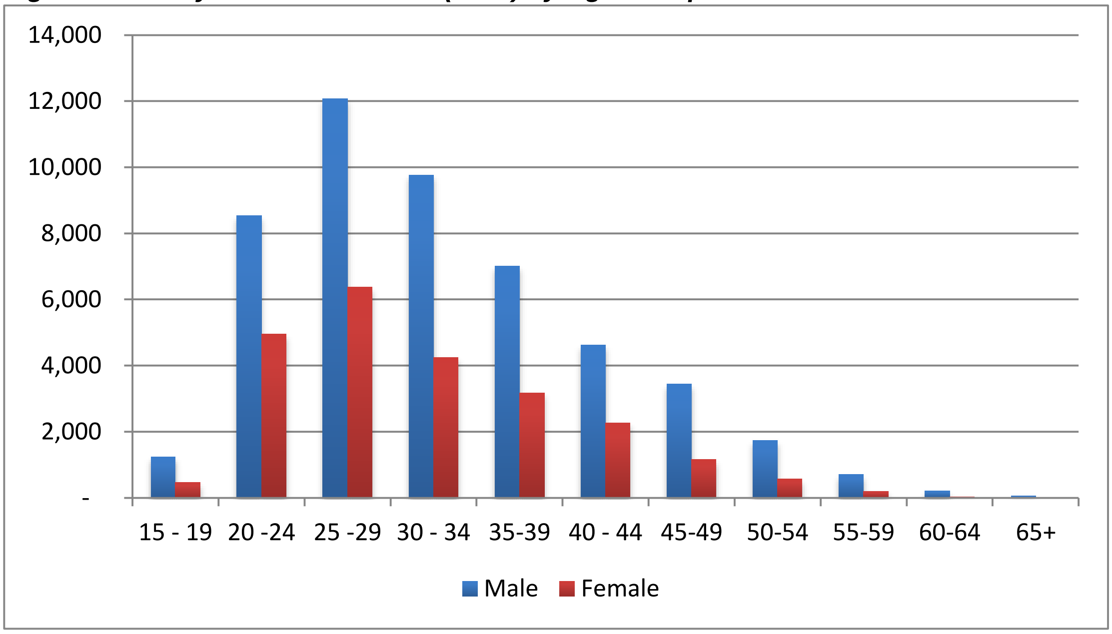


Figure 14-9 and Table 14-7 represents the distribution of the registered Kayseri labour force by education level. The illiterate population comprises 1.1% of the labour force, however the majority of the labour force is composed of male primary school graduates (30.8%), followed by male secondary education graduates (22.1%). University graduates comprise 12.3% of the Kayseri labour force. The total labour force of 72,844 is approximately two thirds male (67.8%) and one third female (32.2%).

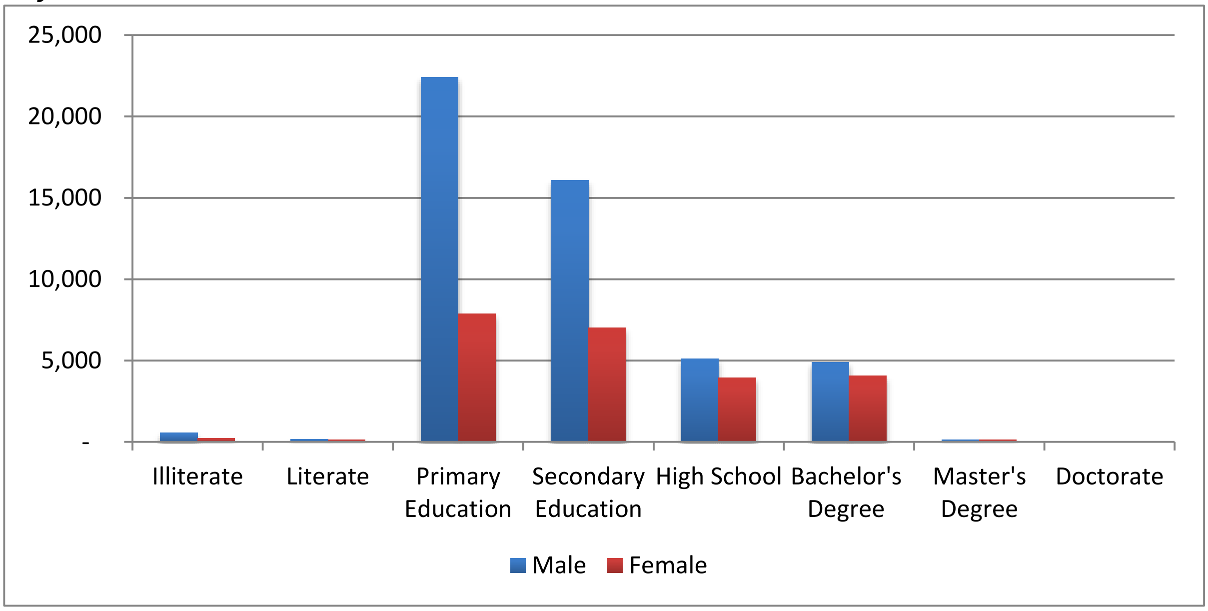
[28] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014
[29] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

However, Figure 14-9 shows that this ratio declines with higher levels of educational attainment, similar to that at the national level.

Table 14-7: Distribution of the Labour Force at the End of 2014 by Educational Status in Kayseri Province[30]

	Male	Female	% Male	% Female
Illiterate	576	227	0.8	0.3
Literate	162	142	0.2	0.2
Primary Education	22,417	7,896	30.8	10.8
Secondary Education	16,103	7,033	22.1	9.7
High School	5,099	3,958	7.0	5.4
Bachelor's Degree	4,881	4,059	6.7	5.6
Master's Degree	143	137	0.2	0.2
Doctorate	7	4	0.0	0.0
Total	49,388	23,456	67.8	32.2

Figure 14-9: Distribution of the Labour Force At the End of 2014 by Educational Status in Kayseri[31]



Unemployment

The rising number of industrial facilities in Kayseri has reduced unemployment. Overall at the Provincial level, the economically inactive urban population is comprised of 58.2% housewives and 22.2% students, while in rural areas housewives comprise 41.3% of the unemployed population and students 37.4%. The lower rate of unemployed females in rural areas can be attributed to farming and agricultural practices, in which most female family members work.

The Table 14-8 and Figure 14-10 show the distribution of the registered unemployed population of Kayseri Province by age group. The majority of the unemployed population is found in the 25–29 year age group (24.7%), followed by the 20–24 year age group at 20.5%. The majority of the registered unemployed population is male (64.4%).

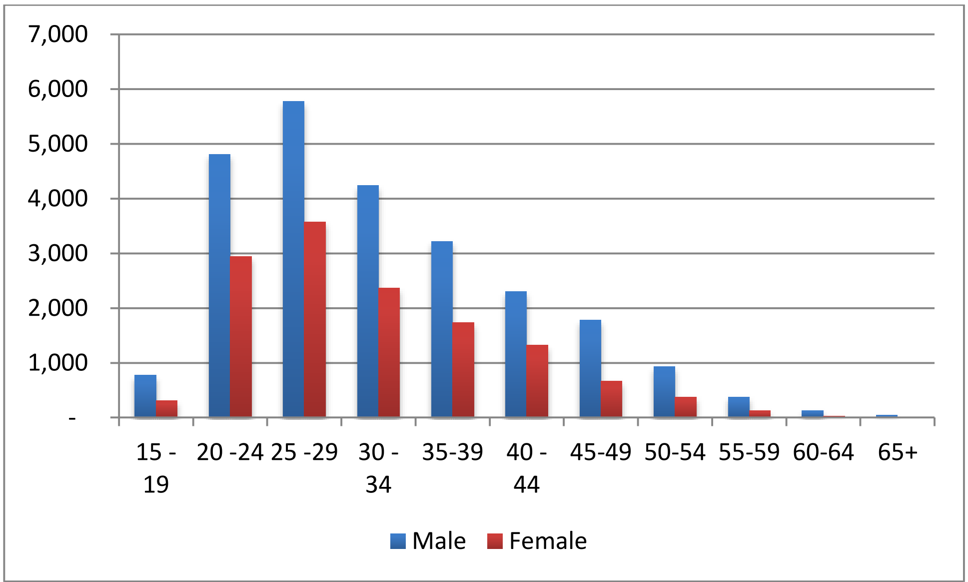
[30] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014
[31] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

Table 14-8: Registered Kayseri Unemployment (2014), by age group[32]

	Male	Female	% Male	% Female
15-19	772	306	2.04	0.81
20-24	4,814	2,940	12.72	7.77
25-29	5,780	3,577	15.27	9.45
30-34	4,240	2,365	11.20	6.25
35-39	3,222	1,734	8.51	4.58
40-44	2,300	1,327	6.08	3.51
45-49	1,780	670	4.70	1.77
50-54	934	378	2.47	1.00
55-59	379	126	1.00	0.33
60-64	132	32	0.35	0.08
65+	42	7	0.11	0.02
Total	**24,395**	**13,462**	**64.44**	**35.56**

The same trend of approximately two thirds male to one third female unemployment are evident by gender, as shown in Figure 14-10. However, of unemployed men, just over 60% are in the 20–35 year age group, while this figure is closer to 66% for women in the same age group. This indicates the unemployed are more youthful in Kayseri than at the national level.

Figure 14-10: Kayseri Registered Unemployed (2014) by Age Group[33]



The registered unemployed population of Kayseri by education level is provided in Table 14-9 and Figure 14-11. The majority of the unemployed population is comprised of primary school graduates (41.8%), followed by the secondary education graduates (30.2%). This mirrors trends at the national level.

32 Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

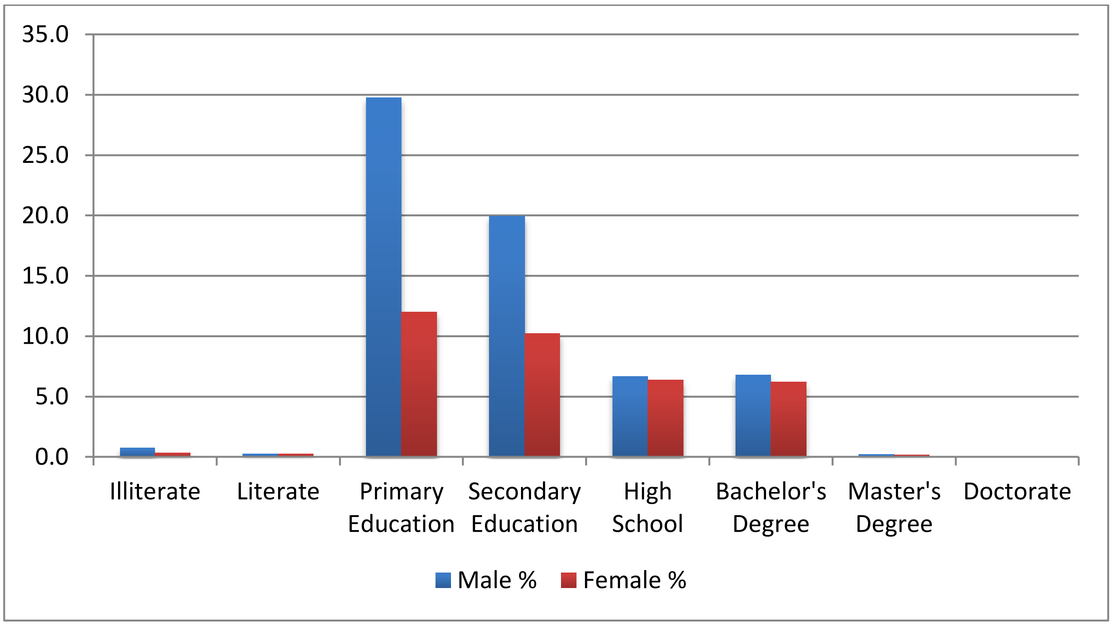
33 Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

Table 14-9: Kayseri Unemployed Distribution (2014) by Educational Attainment[34]

	Male	Female	Male %	Female %
Illiterate	290	120	0.8	0.3
Literate	99	91	0.3	0.2
Primary Education	11,267	4,550	29.8	12.0
Secondary Education	7,558	3,869	20.0	10.2
High School	2,529	2,408	6.7	6.4
Bachelor's Degree	2,570	2,355	6.8	6.2
Master's Degree	79	67	0.2	0.2
Doctorate	3	2	0.0	0.0
Total	24,395	13,462	64.4	35.6

Figure 14-11 shows almost 30% of the Kayseri unemployed population are males with primary school education, followed by males with secondary education (20%). Unlike at the national level, males have higher representation in the unemployed population across all education levels, but closer proportions between men and women at higher levels of education. As at the national level, this suggests barriers to women's' participation in the workforce compared to males with the same educational attainment.

Figure 14-11: Kayseri Unemployment Distribution (2014) by Educational Attainment District Level[35]



The Ministry of Development (then known as the State Planning Organization) last reported unemployment in Turkey at the District level in 2004. According to the data reported at that time, the unemployment rate in the Develi District was 4.94%, ranking the District 462[th] among 872 Districts of Turkey.

[34] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014
[35] Turkish Employment Organization (İŞKUR), Statistical Yearbook, 2014

No updated information has been found for the employment and unemployment statistics of Develi District.

15.1.3 Household Members' Employment

Household surveys in Zile and Öksüt provide indicative profiles of the rural settlements near the mine site.

The average economically active household survey respondent in Zile is a male with a primary occupation of farming (livestock, or agriculture and livestock, combined total of 12%), with no secondary occupation (67% of respondents). The average female respondent is not economically active; she is a housewife (30% of all survey respondents), or a student (8.5% of respondents), again with no secondary occupation. The average economically inactive male respondent is a student (12% of respondents). The other primary, economically active occupations of the surveyed population are tradesmen, craftsmen, civil servant and (an unspecified type of) worker.

Secondary occupations are generally seen in neighbourhoods where citizens are diversifying their income sources or streams to provide additional income and/or security. About two thirds of the surveyed Zile population did not report an additional occupation, while the next two most common responses were economically inactive roles (unpaid family worker and housewife). The categories for the secondary occupations are not different from the reported primary occupations.

Figure 14-12 below shows the majority of the working age population in Zile is engaged in a primary occupation based on farming and agriculture, however these occupations are also taken up outside the working age (i.e. in the 15-19 year age group, and the over 65 age group). The 'worker' category appears most frequently in those under 35 years old, while crafts and trades are more frequently represented in the 35 years and over age groups.

Figure 14-12: Primary Occupations by Age Group in Zile[36]

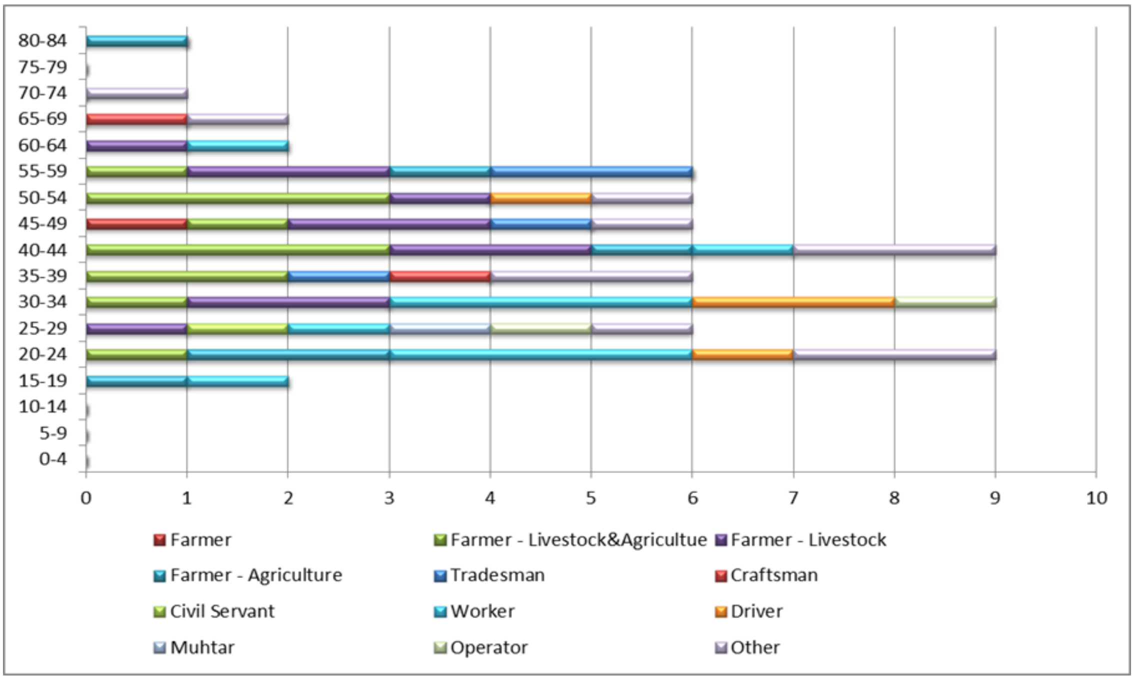
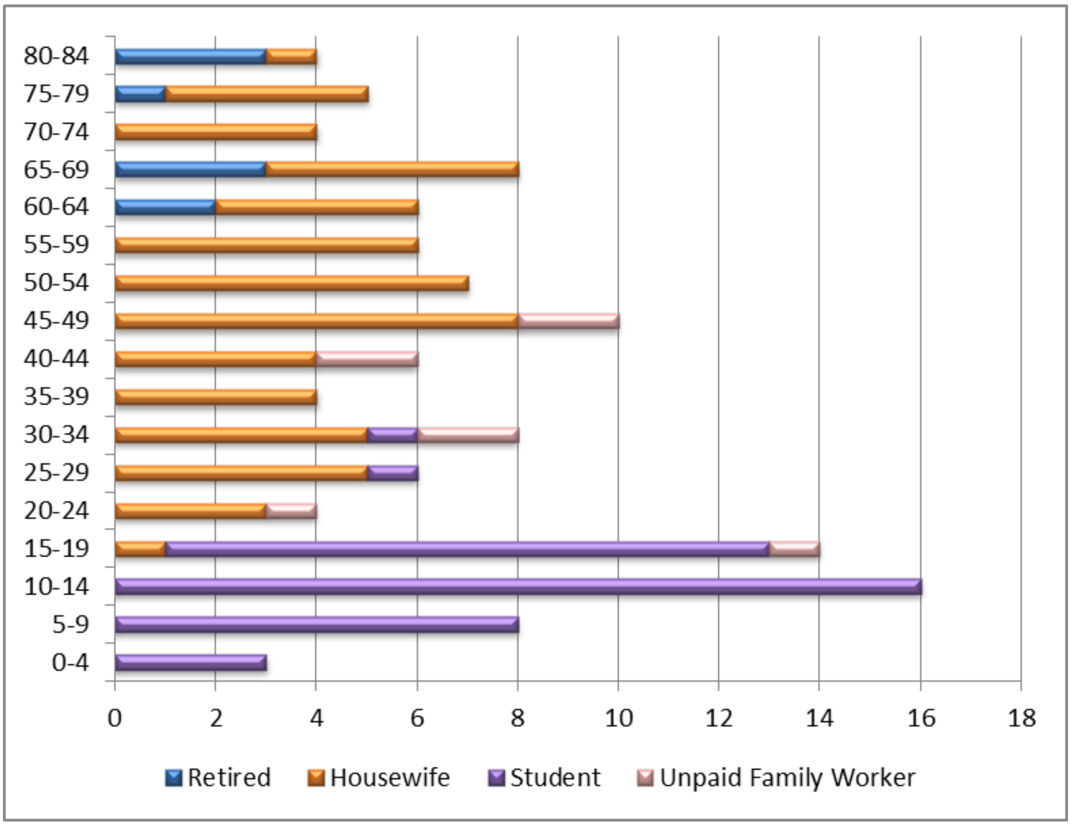


Figure 14-13 below indicates that the economically inactive, housewife role commences from the 15–19 year old age group right through to the oldest (80–84 year) age group, while some of the population indicates retirement from age 60 and above. Unpaid family workers are distributed in the age categories from 15–49 years old, that is, most of these individuals are of working age but are economically inactive.

[36] Household Survey, December 2014

Figure 14-13[37]: Zile Economically Inactive

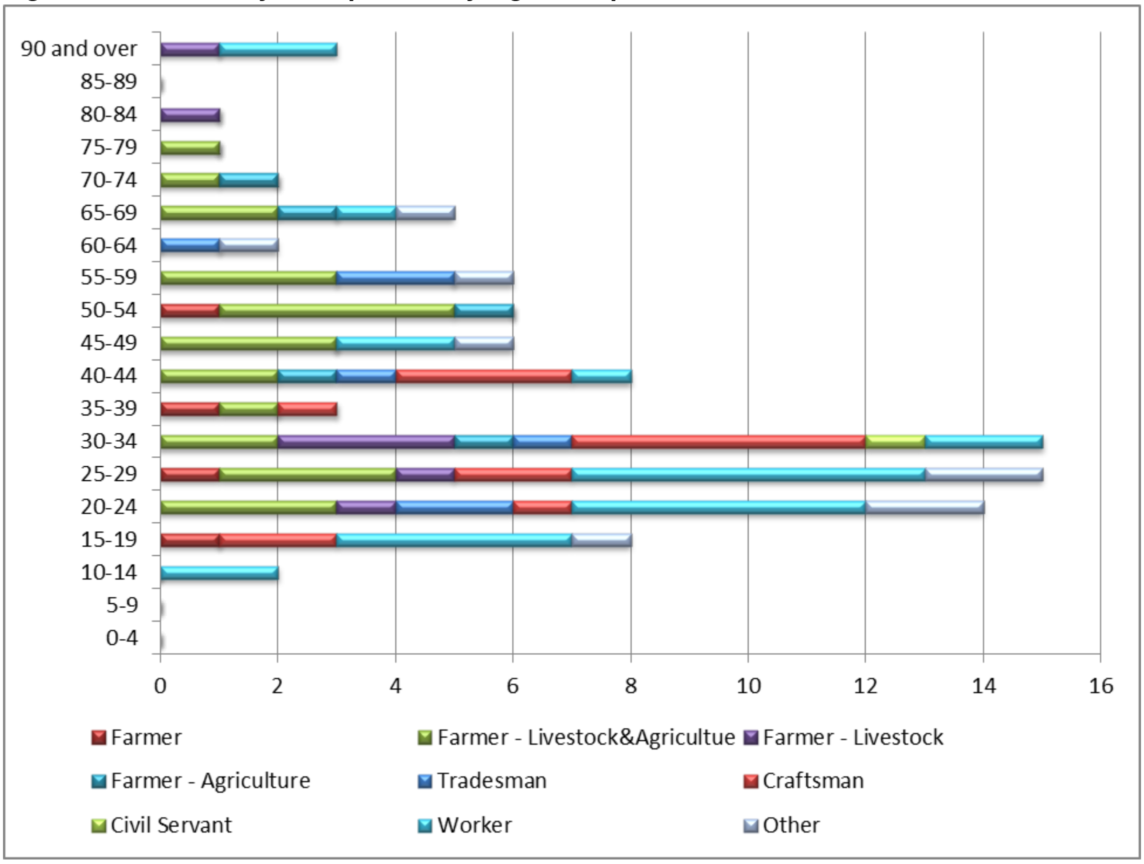


In Öksüt, residents have a similar profile to Zile. The average economically active household survey respondent in Öksüt is a male livestock and agricultural farmer (7.2% of respondents) with no secondary occupation (60% of respondents). The average female respondent is, like Zile, also not economically active, and is a housewife (26% of respondents) or a student (19% of respondents) again with no secondary occupation. The average economically inactive male respondent is either a student (11% of respondents) or retired (8% of respondents). The other primary occupations of the economically active, surveyed population are tradesmen, craftsmen, civil servant and worker. In Öksüt, 60.4% of the surveyed population have mentioned that they do not have additional occupation. The categories for the secondary occupations are not different than the primary occupations.

Figure 14-14 indicates a much higher representation of 'workers' as a primary occupation across all age groups, compared to Zile. Farming and livestock/agricultural occupations appear are practiced prior to, during and beyond the working age.

[37] Household Survey, December 2014

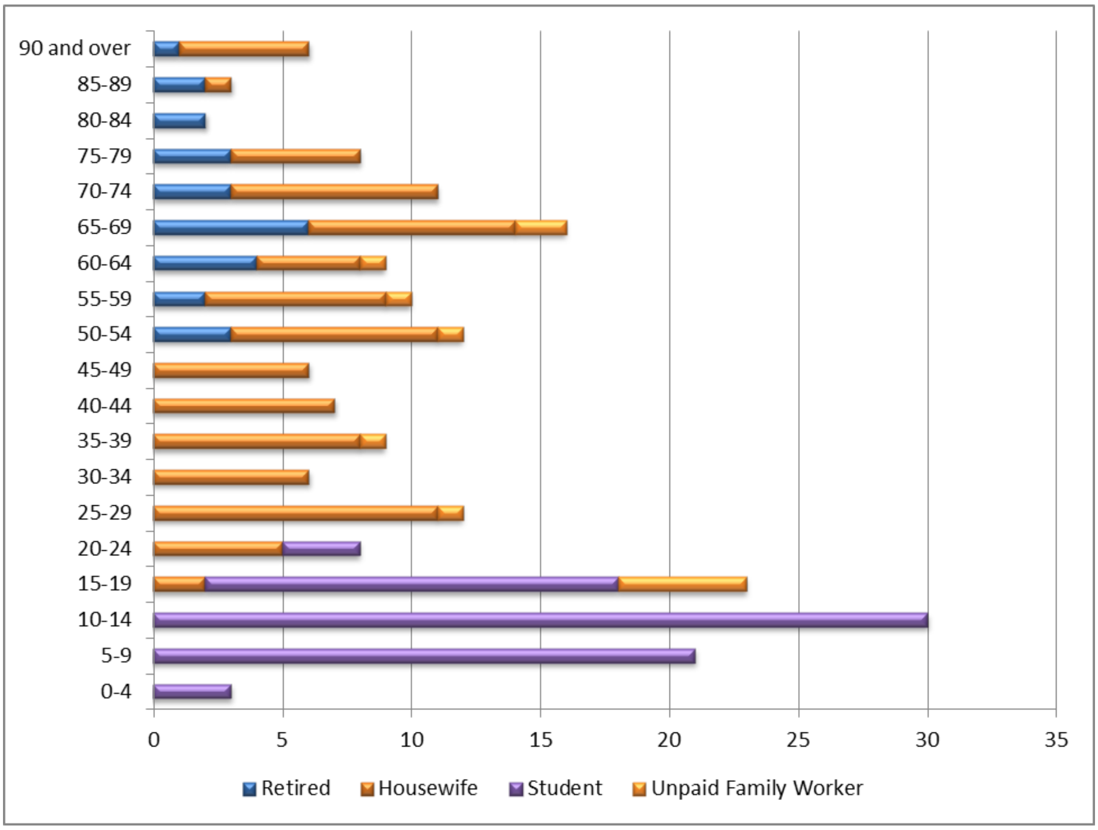
***Figure 14-14: Primary Occupations by Age Group in Öksüt*[38]**



As shown in Figure 14-15, retirement is cited in Öksüt from the 55 year old and above age categories, which is earlier than those in Zile. Students are present up to age 24, which is younger than those in Zile. There is a higher frequency of unpaid family workers in Öksüt than Zile, and across a wider age range, suggesting higher dependency ratios within households in Öksüt.

[38] Household Survey, December 2014

Figure 14-15: Öksüt Economically Inactive[39]



14.5.1 Youth Employment

Youth employment is the major issue both at District and neighbourhood levels, specifically, a lack of youth employment options and the subsequent out-migration of young jobseekers.

All research data (qualitative and quantitative) reported experience of a significant permanent or seasonal out-migration from neighbourhoods. The main reasons for this include: unemployment, where the majority of the population migrating for work is composed of young people of either gender, while the young female population migrates mostly for marriage or education purposes. This is consistent with the lack of reported education facilities at higher levels in the study area neighbourhoods, and the higher proportion of female higher education attainment.

Although the young population in the neighbourhoods located in the study area migrate to Develi for insured jobs (i.e. those that pay social insurance), the key informant interview research results reported that young people of Develi also migrate to other Provinces for work.[40] It was reported that the majority of the population living in Develi District work in Kayseri, requiring a daily commute to work.

Additionally, it was reported that the young population migrating to other Provinces, Districts or countries are obtaining work in a range of sectors including:

- Construction;
- Manufacturing;
- Public works (such as teaching and civil service, within Turkey).

Out-migration of young people was reported in research as follows:

- Epçe: Istanbul, Ankara and Kayseri and Konya; Russia and Arab states;

[39] Household Survey, December 2014
[40] Key Informant Interview, President of the Develi Chamber of Commerce

- Gazi: Develi and Kayseri;
- Gömedi: Istanbul, Ankara, Abroad (including Algeria);
- Öksüt: Istanbul, Russia, Azerbaijan;
- Sarıca: Istanbul, Ankara and Kayseri and abroad;
- Tombak: Develi;
- Yazıbaşı: Antalya, Ankara, Konya, Germany;
- Yukarı Develi: Istanbul, Ankara, Russia.

Further, it was suggested that out-migration of young people inhibits the development of industry in the region[41]:

- *"The biggest problem in terms of livestock breeding is not being able to find young and qualified staff due to emigration. The workforce potential is really low because there is almost no young population. However, the workforce potential of Gazi and Öksüt is high".*

It was reported during research that development of the Project may lead to the improvement of regional industry as it will generate new job and sector opportunities both at the neighbourhood and District level. Further, during focus group discussions conducted with women and men it was reported that development of the OMAS Project may enable repatriation (especially of young people) to both to the District and the neighbourhoods.

14.6 Economic Sectors

14.6.1 Manufacturing

The manufacturing industry is one of the main drivers of the Turkish economy, accounting for 24.2% of total GDP. The Turkish manufacturing industry has been growing over the past decade and increasing at an annual growth rate of 11% since 2004. In 2014 it exceeded gross domestic product growth levels and reached approximately USD $104 billion. The Turkish manufacturing sector recovered quickly after the 2009 global economic recession and growth rates exceeded pre-crisis levels with an average annual growth rate of 6.8% between 2009 and 2014. Manufacturing of electrical equipment, metal products and furniture are key sectors in Kayseri.

Industry in Develi District is not well developed and a significant portion of the District's population emigrates to other cities or countries to work permanently or seasonally in construction. The two key manufacturing industry establishments in Develi are Saray Carpet Factory and Gürsel Shoe Factory. It is estimated that Gürsel Shoe Factory employs around 200 people. According to the Develi Chamber of Commerce the carpet industry is the largest employer in the District followed by livestock breeding. A number of small scale textile mills manufacturing products for big companies in İstanbul are also a key employer in the region along with Kayseri Organized Industrial Site, which employs the majority of the population living in Develi centre.

Industrial activities in the social study area are limited, with approximately 10 people from Yukarı Develi employed at Saray Carpet Factory.

14.6.2 Mining

In Turkey the mining industry has experienced fast growth in revenues and profit over the last 10 years. Turkey is ranked the tenth producer of minerals in the world in terms of diversity. Turkey hosts 72 mineral types and currently produces around 60 different minerals. The richest mineral deposits in the country are boron salts, Turkey's reserves amount to 72% of the world's total.

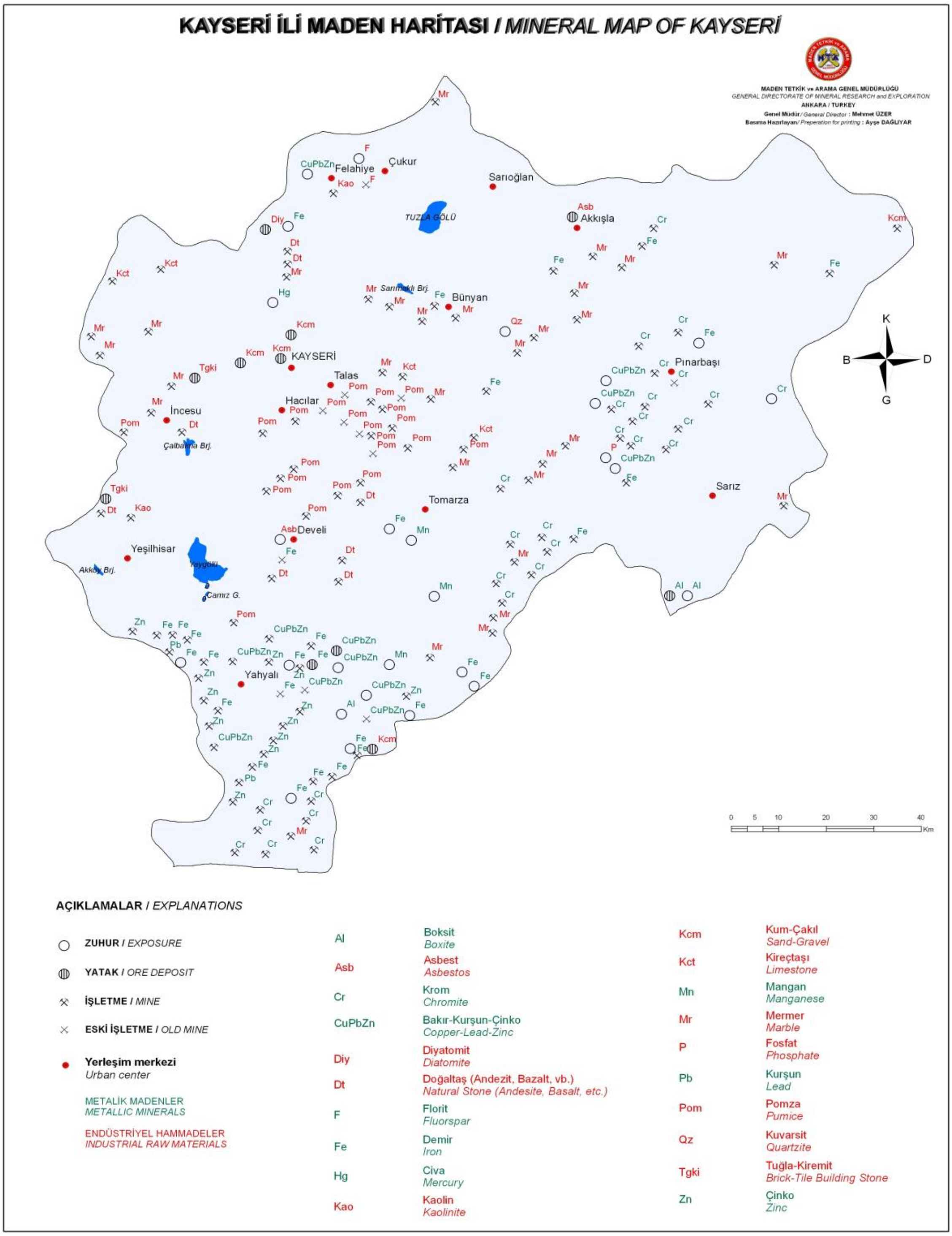
[41] Key Informant Interview, President of the Develi Chamber of Commerce

Kayseri is an important mining region, with over 50% of the country's iron ore reserves located within the region. Kayseri hosts a range of industrial and precious metals including:

- chrome;
- copper;
- iron;
- lead;
- manganese;
- pumice;
- chalk stone;
- industrial stone including kaolin, diatomite;
- marble and travertine.

Kayseri has over 50 current and historical mines, currently 17% of mining licences issued in Kayseri belong to chrome mines. Develi District is known for deposits of copper, lead, zinc and iron and has a number of active small scale mines. Öksüt is the first gold mine in the District. Figure 14-16 provides a summary of the active and historic mines in Kayseri Province.

Figure 14-16: Summary of Current and Former Mines in Kayseri Province



14.6.3 Agriculture

Turkey has a large and growing food and agriculture industry that corresponds to 9% of the overall gross value-added (GVA) and 25% of employment in the country. Turkey is the world leading producer of dried figs, hazelnuts, sultanas/raisins and dried apricots. It has a large milk and dairy sector.

Agriculture forms a key sector in the Kayseri region with 97% of agricultural land in the Province used for farming. Introduction of the *Succession Law* led to fragmentation of land parcels and caused a decrease in the availability of economic farmland in the area, this is described in more detail in *Chapter 15: Land Ownership and Use*. Key crops in the region include barley, wheat, rye, corn, triticale and oats with only 3% of planted farms growing fruit and vegetables. White sugar beet is produced as a cash crop in the region and often sold to the Kayseri Sugar Factory through their Kayseri Beet Sugar Planter Cooperative. Approximately 295 villages surrounding Kayseri participate in the cooperative including the neighbourhoods of Zile and Tombak in the social study area. Certified organic farming is dominated by the private sector within Kayseri city and is limited to fruit production. Subsistence uncertified organic farming is practiced in several neighbourhoods in the region however produce is consumed within the household and does not make it to market. Animal husbandry activities include sheep, cattle and poultry breeding.

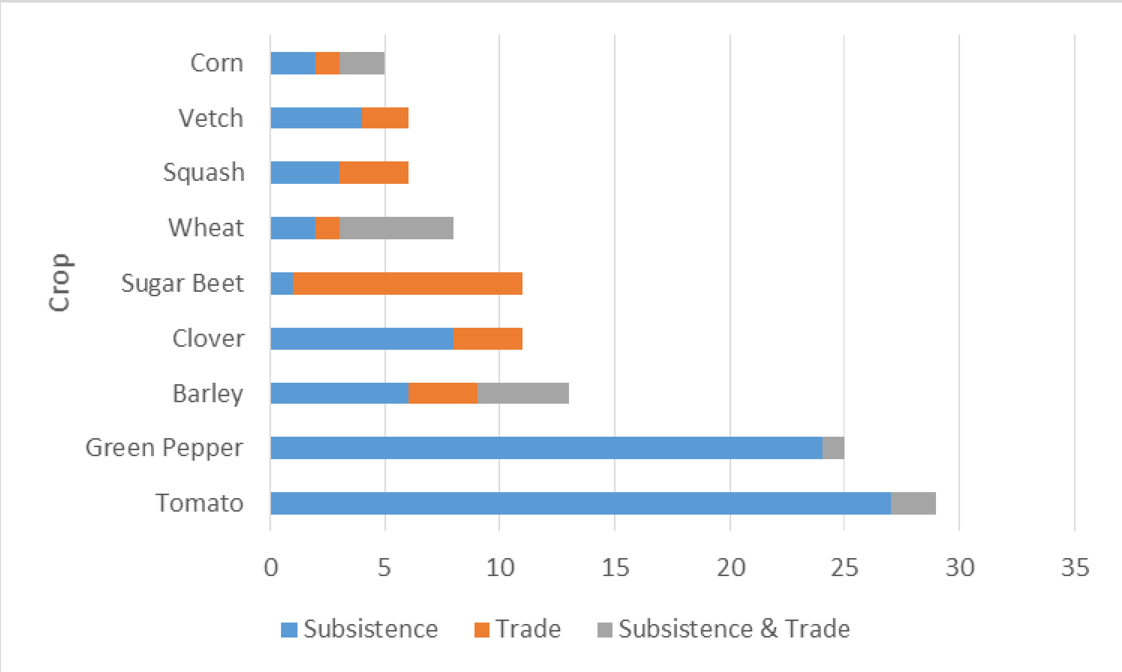
The agricultural service sector in the region is strong with 31,873 agriculture enterprises in Kayseri, engaging 47% of the population. The majority of service providers work with both arable and pastoral farming (78%) with few specialist enterprises dealing solely with agriculture (15%) and animal production (7%).

Dry farming is widespread across the social study area with the exception of Zile, Epce and Sarıca. In Zile irrigated agriculture is the primary source of income for 34% of households. The main crops cultivated commercially in the village include sugar beet, wheat, barley, rye, pumpkin and corn. The residents of Zile grow a range of crops on a subsistence basis including tomato, cucumber, pepper, bean, aubergine, okra, and pumpkin. In some cases, where production allows it, surplus production is sold as Develi Bazaar (Figure 14-17).

Approximately 60% of households in Zile have vineyards and produce grapes for pekmez[42] production for household consumption. One household has a commercial agreement with TURASAN vineyard and sells their grapes for wine production.

[42] Pekmez is a molasses-like syrup obtained after condensing juices of fruit must, especially grape by boiling it with a coagulant agent. It is often used as a syrup or mixed with tahini for breakfast.

Figure 14-17: Summary of Zile Crop Production and Use[43]



In Öksüt, Yukarı Develi and Yazıbaşı the main crops cultivated for commercial purposes include wheat, barley, bean and chickpea. Harvested crops are grown commercially and sold to traders. In Öksüt, walnut, corn, clove, and silage are grown for subsistence purposes, but poor irrigation prevents their growth on a commercial scale. In previous years the "Öksüt apple" was very famous however cultivation has ceased due to irrigation problems. In Yazıbaşı ın the last few years, pumpkin, wheat and barley production has shown an increase because of the improved techniques used in agriculture. Men in the focus group discussion noted that "*we do not do irrigated farming, we do only dry farming. Wheat, barley, rye, pumpkin and pulps are amongst those products mostly planted. They are sold to merchants*".

In Sarıca and Yukarı Develi, bean, potato, tomato and cucumber are grown for subsistence use. Sarıca also grows sugar beet and residents collect mushroom, thyme and some different types of forest plants for subsistence purposes. Sarıca farmers mentioned that there is not sufficient irrigation water during April - June and they often have a water shortage in July. Water supply for their irrigation comes from the DSI channels (State Water Authority).

The agricultural activity of Tombak is based on dry farming, however there are approximately 20 households which are engaged in irrigated agriculture. The main harvested crops in the neighbourhood are sugar beet, wheat, barley, clover, potato and corn. All of the crops are produced for trading and subsistence purposes. Over the last 5 years, due to upgraded irrigation methods, crop yields were reported to have increased.

The Gazi Muhtar reports that "*Gazi used to produce sunflower seeds commercially but the intermediary merchants pay less than the actual market rate and it is no longer profitable to grow the crop. Previously, products were sold to the Crop Office, but since this office was shut-down, it is no longer possible. Since the office closed we do not grow wheat and pea as we used to before in the village, we now mostly plant animal fodder*".

[43] Baseline survey, December 2014

14.6.4 Animal Husbandry

Regulatory environment

The Turkish Government comprehensively amended livestock subsidies in 2008 and increased direct subsidies for animals per head[44]. The share of livestock eligible for subsidies in the agriculture sector was 24.4% in 2011 (up from 8% in 2004), 31.7% in 2013, 30.5% in 2014 and it will reduce slightly to 29.5% in 2015. The largest share of subsidies within the livestock sector in 2011 was for milk with 26%, closely followed by a 20% incentive for cattle breeding and a 15% incentive for feed processing.

Table 14-10: Government Livestock Subsidies[45]

Cabinet Decree Article 4- (1) Payment Per Animal	**Support per Unit**
Milkman and sectional races and crossbreed and angus' crossbreed, grown up cattle	225 TRY/per animal
Grown up angus	350 TRY/per animal
Grown up water buffalo	400 TRY/per animal
Milkman and sectional races and with crossbreed, grown up cattle, in addition pedigree	70 TRY/per animal
Cabinet Decree Article 4- (3) Herd owner, Employment support	
To the employers who have 500 and above ovine animals, starts in 2014	Director of herd owners - employment support 5000 TRY/enterprise. This is paid from the budget of 2015.
Cabinet Decree Article 4- (5) Support For Sheep and Goat	20TRY/per animal
Angora	20 TRY/per animal
Water buffalo, sheep- goat milks	0.2 TRY/lt
Cabinet Decree Item 4- (10) *Apiculture*	
Bee hive	10 TRY/per hive
Bumblebee	60 TRY/colony
Cabinet Decree Article 4- (14) Support of Vaccine	
Alum vaccine (Bovine animal)	0,75 TRY/per animal
Alum vaccine (Small cattle)	0,50 TRY/per animal
Brucellosis (Bovine animal)	1,50 TRY/per animal
Brucellosis (Small cattle)	0,50 TRY/per animal
Cabinet Decree Article 4- (13) Forage Plants[46]	
Clover (irrigated farming)	50 TRY/ decare/year
Clover (Dry farming)	30 TRY/ decare /year
Trefoil	40 TRY/ decare /year

44 Decision No.2008/13489 dated April 15, 2008
45 USDA GAIN Report TR5042 (Aug 2015) Turkish Livestock Support and Subsidies (http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Turkish%20Livestock%20Support%20and%20Subsidies_Ankara_Turkey_8-12-2015.pdf)
46 One decare is 1,000m^2, or 0.1ha

Silage, annual forage legumes	50 TRY/ decare /year
Corn(silage) (irrigated farming)	75 TRY/ decare /year
Corn(silage) (dry farming)	35 TRY/ decare /year
Prairie-forage(artificial)	100 TRY/ decare /year

Subsidy payments include those included in Table 14-10, and have influenced the number and types of animals stocked in the social study area, for example, production of milk products, described in the neighbourhood section below.

District and Neighbourhood-Level Production

Animal husbandry, particularly of bovine and ovine livestock has increased within the region following the establishment of several feed plants and meat processing facilities in Kayseri in the 1960s. Today the sector is growing due to the introduction of processing facilities including milk factories, slaughter houses and meat curing facilities.

The advancement in food technology and increase in investment has resulted in the emergence of several large scale modern farms. However, sheep breeding and herding is still common due to the regional topography, with transhumance grazing predominant in the Develi District.

Livestock breeding is a major income source for the lower plain (the lowland region surrounding the mine). One of the most important livestock breeding facilities in the region is the Saray Livestock Facility. Tha Saray Livestock Facility has been used as a model within the region and two new facilities have been established based on its footprint; Uğurlu Farming (400 livestock capacity) and Merkez Agricultural Cooperative (500 livestock capacity).

The United Agricultural Development Cooperative is the first agricultural development cooperative in Develi and has the potential to allow small farmers to gain access to market. Uptake by farmers has been poor due to negative perceptions of the initiative within the village setting and this has limited the success of the cooperative.

Livestock breeding in the Erciyes Master Plan region is also threatened due to the increase in hotel and tourist facilities on formerly designated pasture land*, Chapter 15: Land Ownership and Use* describes regional changes in more detail. Lack of replacement land has resulted in the reduction in grazing land for livestock herders. Poor access to market has also impacted the livestock industry with the livestock market in Develi being closed following an inspection in December 2014 which discovered the disease nodular exanthema, and so limiting livestock sale opportunities.

In Yukarı Develi, several certified courses have been established to allow herders to gain formal qualifications and the majority of people engaged in livestock breeding have undertaken the courses.

Strengthening the livestock sector is the recent growth in food processing facilities in Develi, including the national companies SÜTAŞ, Pınar and Ülker who produce milk in the region. Saray Livestock Facility has also established in the region and has its own dairy and slaughterhouse and has established contracts with a number of big market chains in Develi.

Currently local people can only sell their products in Develi Bazaar and do not have access to the corporate market as they do not have the correct permission from the Ministry of Health. Access to the corporate markets could be achieved through the establishment of a cooperative, however the limited success of the United Agricultural Development Cooperative demonstrates neighbourhoods' lack of willingness to engage in this type of activity.

Livestock practices have changed over the last few years as consumers prefer cow's milk and cheese over the traditional sheep cheese. This has led to an increase in cattle rearing and added to the decline of sheep rearing in the region.

In the social study area animal husbandry is a key economic activity. Zile, Gazi, Yazibaşi, Gömedi Tombak, and Epçe keep livestock for both subsistence and commercial purposes, trading animals, meat and milk with merchants and milk producers. The men's focus group discussion in Epçe reported that "*Milk is sold by nearly every person in the village that has an animal*". Sarıca predominantly raises cattle for subsistence purposes, as does Öksüt. Öksüt is a major producer of sheep and goats for trade, with over 95% of sheep and goats traded from the village with an approximate value of 950,000 TRY. Livestock rearing and trading has seen a marked decrease in all settlements in the social study area due to outward migration of the youth, however Tombak and Öksüt report the greatest decline in livestock trade in the last 5 years.

In Öksüt, livestock rearing is typically undertaken by a limited number of more youthful households who have large flocks. Approximately 3,000 sheep and goats are reared by 6 households, with two households accounting for the majority of the livestock. A significant amount of the wealth within the village is held by a small number of households, this is directly linked to livestock herd size. Approximately 150 cows are kept by 10 households. Shepherds are hired by some households to tend to their cattle and receive 1350 TRY per animal. Livestock rearing has declined by 80% in recent years due to out migration of youth. Over 90% of cattle raised is consumed within the household and is not sold or traded.

In Zile, cattle rearing (3,000 animals) is more common than rearing of sheep and goats (300 animals) due to the subsidies provided by the government and the profits available on the sale of cow's milk. Sheep and goats are reared for both subsistence and trading purposes. The women of Zile are known for their animal products, which they sell at Develi Bazaar.

Livestock breeding is common in Gazi with approximately 400 bovine animals and 2,000 ovine animals (sheep). The farmers sell their milk to different factories. Grazing land is a major problem for the farmers as the neighbourhood does not have its own pastureland so residents must rent land for grazing purposes. The majority of the animal owners take their animals to Erciyes in March; while they use their barns during winter. There are also 2 or 3 households who go to Erciyes[47] and live in tents during the grazing period with their animals.

In Yazıbaşı there are approximately 1,800 ovine animals and 250 bovine animals. The households engaged in animal husbandry do so for trading purposes and sell the animals, meat, cheese, milk and other animal products. The participants of focus group discussions reported that their pastureland is sufficient for their animals and they do not use Erciyes Mountain as grazing land. Most of the participants engaged in animal husbandry mentioned that livestock breeding is not profitable as they can only sell their animals for low prices. The number of bovine animals being kept has increased because of the credits provided by the government however it has not changed the profitability of livestock breeding.

Livestock breeding in Tombak has shown a decrease due to the increasing outward migration rate in the neighbourhood and the high cost of livestock breeding. The *muhtar* of the neighbourhood noted that local people prefer to spend their money on their household needs rather than their animals. During the men's focus group discussion, the participants mentioned that there is only one household who has 400 sheep and only four households engaged in bovine animal husbandry. The total number of bovine animals in the neighbourhood is approximately 25, kept for subsistence purposes only. Trade within the village of cheese and milk is undertaken on an 'as requested' basis, as noted in the men's focus group discussion *'I make cheese to sell, if my neighbour says to me "make cheese", I make it upon request*".

Sarıca neighbourhood has approximately 1,000 ovine animals and they use the pasturelands in Bozdağ. Less than 25% of households undertake animal husbandry practices, and households report that most livestock is kept for trade. During the men's focus group discussion it was noted that '*Bozdağ locality is used for grazing, other pasture land areas are exhausted. The remaining pasturage areas used are located where the mine will exist'*.

[47] Erciyes is an area to the north of the Project area, which has pasture suitable for summer grazing. It is also now designated as a winter tourism area, which will preclude access to grazing in certain areas.

In Gömedi, the households engaged in livestock breeding do so for subsistence purposes and sell any surplus products to traders and merchants. There are some households who sell their milk to one of the biggest milk products company in Turkey; SÜTAŞ. Livestock rearing has declined in the last decade and it was noted during the men's focus group discussion that '*there are no small cattle anymore, 10 years ago there were over 1000 small cattle in the village'*.

In Epçe, the main economic income source is animal husbandry and during the focus group discussion, it was noted that 80% of the households are engaged in livestock breeding. The households which do not have animals are the newly married families. There are approximately 200 ovine and 600 bovine animals. The farmers undertaking livestock breeding on a commercial basis do so for trading purposes and to sell milk to various merchants. They graze their animals in the uplands during spring and summer and feed them in their barns during winter.

14.6.5 Apiary

In Turkey over 200,000 agricultural organisations undertake apiculture activities, however only approximately 20,000 of these organisations rely solely on apiculture as their main source of income. Develi has approximately 50 beekeepers, although this number is likely to be higher as the region receives a significant number of migratory beekeepers (100-150) who come to the region seasonally. These migratory beekeepers have to inform the District Directorate of Food, Agriculture and Livestock before they arrive in the region. The majority of migrant beekeepers travel to the Erciyes region or to the villages near the foot of the Taurus Mountains. According to the District Directorate of Food, Agriculture and Livestock the proposed mine area is used by the seasonal beekeepers.

Beekeeping is common within the social study area and is undertaken both for subsistence purposes and trade. Yukarı Develi (1,500 hives), Zile (300 hives) and Tombak (380 hives) are the largest producers of honey in the region. Beekeepers in Zile produce Karakovan honey and sell it locally themselves, any surplus is sold on to merchants. Beekeepers in Tombak produce honey commercially and sell it in Develi and Istanbul. The Zile *muhtar* also noted that between April and August migratory beekeepers come to the Dalaktepe area to undertake apiculture activities. No beekeepers have been identified in the EIA Permitted Area.

14.6.6 Business Support

Over the last ten years, Develi has seen an increase in agriculture service companies including agricultural tool production and service providers. The expansion of the sector is largely in response to the large agriculture sector in the region and was strengthened through government funding. According to the Develi District of Commerce growth of these enterprises has been limited by the purchasing power of the agricultural community in the Develi region and the inability of the service enterprises to expand their services to other districts.

The Develi District of Commerce views OMAS as a key opportunity for the region to bring in direct and induced economic development and provide a market for the establishment of mine related service providers. Vocational training is seen as a key factor to accessing the full potential of the potential economic benefit the mine may have in Develi District.

14.6.7 New Economic Opportunities

New economic opportunities are focussed on the mine and the provision of goods and services directly and indirectly. Local residents in the Develi District see the start of mining operations as a positive new economic opportunity for the region as reported through the baseline research. Currently a significant number of young people in the settlements in the social study area leave for larger cities in pursuit of employment and so villagers report that they hope the mine will provide a source of local employment and reduce the trend of outward migration, and potentially encourage some former residents to return.

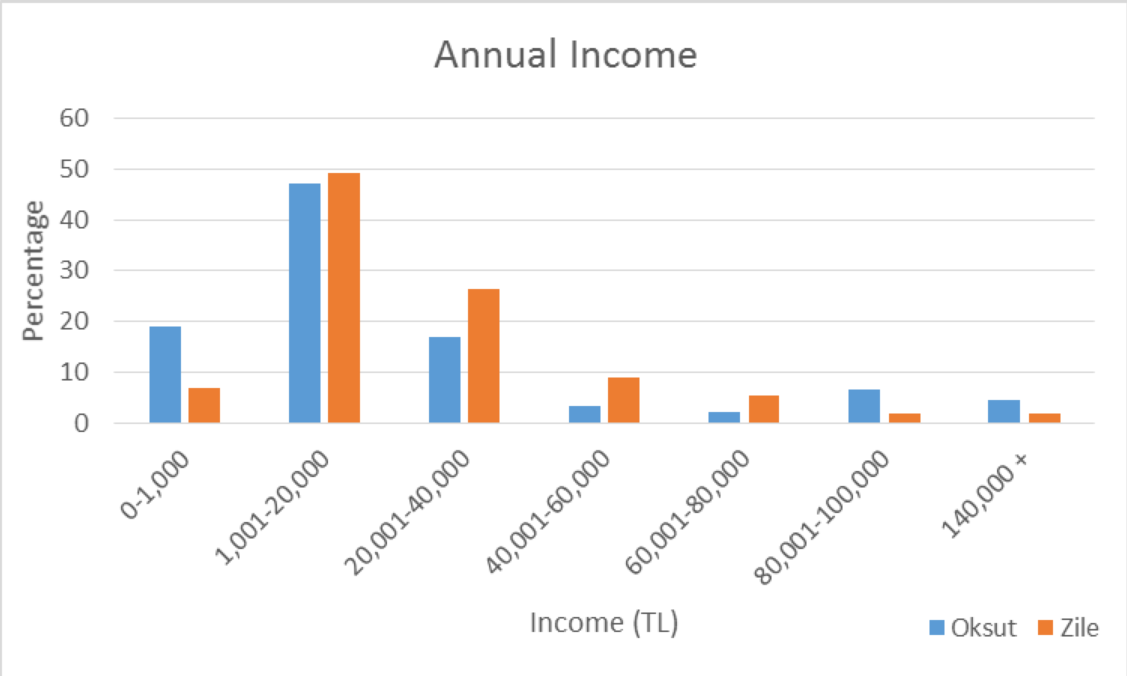
Tradesmen in Develi are hoping to work collaboratively with the mine in order to provide services to the supply chain, however it was reported during baseline research that they will require guidance and information from the mine on the services and goods that will be required in order to ensure they are well placed to provide the necessary goods.

14.6.8 Household Income and Expenditure

Household incomes

In Turkey, the national average household income was 78,000 TRY in 2014. As an indication of local incomes, according to the household survey, about half of households in Öksüt earn between 1,000–20,000 TRY per year, with almost 20% earning less than 1,000 TRY per annum. The average annual income is expected to be lower in rural regions, however Öksüt is low for the region. This is likely due to the high percentage of retired residents who live on a state pension. Similarly, in Zile, just under 50% of households earning between 1,000-20,000 TRY and a quarter reported earning between 20,000-40,000 TRY per household. Many of the residents in Zile are engaged in cattle rearing and the sale of livestock and milk. High government subsidies and demand for milk provides Zile residents with a higher annual income than Öksüt.

Figure 14-18: Annual Household Income Öksüt and Zile[48]



14.7 Impact Assessment

This section identifies and assesses impacts related to economics and employment for the Project.

Scoped In

Economic and employment impacts will potentially occur during the Project's construction, operations and closure phases. Anticipated impacts include:

- Changes in tax revenue.
- Changes in direct employment (with Project proponent).
- Changes in indirect employment (with contractors).
- Changes in procurement.

[48] Baseline survey, December 2014

- Inflation in local economies.

These above impacts and benefits are assessed in the following sections.

Scoped Out

No impacts were scoped out.

14.7.1 Construction and Operations Phase Impacts and Mitigation Measures

Changes in Tax Revenue

Impact Assessment

Impact	Changes in tax revenue
Receptor Sensitivity[49]	High
Impact Magnitude	Direct, long term, widespread and certain to occur. Low impact magnitude
Significance	**Minor beneficial**

Increased revenue to the State budget will be a benefit of the Project through its royalties and tax payments.

Chapter 5: Project Description includes the income tax regime for a gold mining project in Turkey and the basis for calculation of this amount. The Öksüt Project estimates a total life of mine tax payments at USD $46 million[50].

The new Turkish Mining Law provides for royalty payments based on mineral price and value adding activity. So for example the total effective royalty rate used for the economic analysis, at an assumed gold price of $1,250/oz, is 3.6%. Further, OMAS would be exempt from half of this royalty payment if the gold is produced in the Project's gold plant[51]. However, the regulations guiding implementation of this law are yet to be developed, thus the existing regulation remains in place which requires the following royalty payments:

- 50% of the Royalty goes to Ministry of Treasury account;
- 25% of the Royalty goes to Regional Governorship account;
- 25% of the Royalty goes to City Municipality.

In effect, the royalty contribution ensures that a quarter of the payment is directed to the budget of the Municipality in which the Project is located.

The Project 43-101 Report (*Annex A*) includes an estimate of cash flow for the Project has been made using a price of gold of $1,250 per ounce. Key elements of this include:

- Total free cash flows: $436M at gold price of $1,250 per ounce;
- Total tax payments: $46M[52];

[49] Sensitivity for social impacts, unlike environmental impacts that are linked to the quality and rarity of the receptor, is linked to the consequence of a change and whether a change would impair (or benefit) quality of life. "Very high" would seriously impair (or substantially improve) quality of life. "Low" would be a change from baseline conditions, but not impair or change the quality of life.
[50] Using a price of gold of $1,250 per ounce, as assumed for the Mineral Reserve estimation process, Source: 43-101 report, 03 September 2015
[51] Article 9 (Mining Law, February 2015) states that "those that create additional added value by processing the minerals they have produced at their plants that are within the country shall not be required to pay the 50% of the State rights for the quantity of the minerals used for production at these plants."
[52] This assumes a strategic designated Investment Incentive Certificate.

- Total State royalty payments: $18M;

The impact of tax revenues are a positive impact with high sensitivity. The impact is direct, long term and will extend beyond the local area. The magnitude is considered low, however, due to fact that increased tax revenue can have mixed results. Non-transparent payment of taxes, particularly in the extractive industries, has led in other countries to corruption and lost benefits when revenues are not paid transparently and monitored. Significance is considered minor beneficial.

Impact Mitigation
The management of economic benefits from the Project is primarily the responsibility of the government. While Turkey is not currently a candidate country for the Extractive Industries Transparency Initiative (EITI), Centerra have been a supporter of EITI since 2011 and will apply standards of disclosure similar to its mines in Kyrgyzstan and Mongolia for the Project.

Residual Effects
Transparency of tax payments is expected to increase accountability linked to tax payments, decreasing the possibility of mixed results. For this reason, the residual effects of tax revenue is **moderate beneficial**.

Changes in Direct Employment

Impact Assessment

Impact	Changes in direct employment (with Project proponent)
Receptor Sensitivity	High
Impact Magnitude	Direct, long term, widespread and certain to occur. Low impact magnitude
Significance	**Minor beneficial**

The Project will require highly skilled, semi-skilled and unskilled workers to undertake construction and operational duties and estimates the following workforce during the construction and operations phases, as shown in Table 14-11. This includes direct opportunities (those jobs with the Company, both permanent and temporary), indirect employment opportunities (those jobs with the contractors and suppliers), and resultant induced employment (employment arising from increased disposable income and demand for additional goods and services). Indirect impact is considered in more detail in the next impact topic.

Table 14-11: Project workforce estimates[53]

Employment Type	Construction	Operations
Employees	55	156
Contractors	350	300
Induced (range)	1,140-2,098	

The project is expected to create 405 jobs during construction (55 OMAS employees and approximately 350 contractors) and 456 jobs during operation (156 OMAS employees and approximately 300

[53] Sources: Centerra 43-101 Report, OMAS communications

contractors)[54], with an expectation of between 1,140[55]-2,098[56] induced jobs during the operational phase of the Project.

The Construction phase workforce is estimated at 405 people. It is anticipated that Turkish contractors will undertake the majority of the earthworks activities, which will be one of the larger components of the workforce, and so promoting employment of Turkish nationals, including encouragement of local employment. The Construction Contractor and Contract Miner will be the more significant contracts let during the course of the Project with respect to employment opportunities.

The impact of direct employment is considered a positive impact with high sensitivity, underlined by the frequency of employment being raised during consultation. The impact is direct, long term and will extend beyond the local area, even though efforts will be made to localise employment to the extent possible, and is certain to occur. However, direct employment can have important negative impacts if not managed well and clearly communicated to local residents with high expectations for salaried jobs. Even in situations where human resources are managed well, rumours and the perception of nepotism favouring “outside” workers creates jealously and potential conflict among the workforce. For these reasons, the magnitude of direct employment is considered low prior to the application of human resources policy and procedures. Significance is considered minor beneficial.

Impact Mitigation
The Project has set employment targets, which are considered a benefit of the Project experienced at the local, regional and national level through positive economic impacts as a result of direct wage payments to employees and contractors, and a positive impact on unemployment. However, it is recognised that this target is set within the context of low skills capacity and the educational attainment of the work pool.

The precedent exists in Turkey where mine commencement was delayed where local employment was considered insufficient[57]. OMAS has set and is engaging with stakeholders on preliminary employment targets. Targets by geographical area and skill levels are shown in Table 14-12.

Table 14-12: Preliminary Employment Targets

	Settlements in the Project Area	Provincial (Develi-Kayseri)	Turkish Nationals
Unskilled	100%	100%	100%
Semi-skilled	70%	30%	100%
Skilled	-	50%	90%

The overarching document labour management is the Labour Management Plan (OMAS-ESMS-LM-PLN-001). This defines two main categories of employee as Permanent Employees and Temporary Employees (or Contractors), which are considered in greater detail in the next impact topic. All recruitment information and employment contracts will specify an employee category and duration of the employment term.

Permanent Employees are the Project personnel who have indefinite employment appointments. OMAS has introduced position grades, defined in the relevant Human Resource documentation, that cover the

[54] The Turkish EIA reported that 500 people will be employed during construction and 300 during operation. For the purposes of this ESIA, the projected number of OMAS employees for operation has been updated based on the new estimates from OMAS.
[55] The International Council for Mining and Metals (ICMM) Toolkit (2008) states that induced employment is typically in the range of 165-250% of the sum of direct and indirect employment. This indicates that 752-1,140 induced jobs will be created indirectly by the Project. The higher multiplier of 2.5 has been assumed for this Project as OMAS is committed to using local content where possible.
[56] Using a multiplier of 4.6 for gold mining that was used in the Turkish EIA suggests 1,380 indirect/induced jobs will be created (Alkın, Erdoğan (1992), Gelir ve Büyüme Teorisi, İstanbul) during operation with a workforce of 300, which was the estimated number of employees at the time of writing the Turkish EIA. Using the Alkın multiplier, a workforce of 456 indicates that 2,098 indirect and induced jobs will be created by the Project.
57 OMAS communications

range of skilled, semi-skilled and unskilled workers. Employee grades designate the ranges of remuneration rate and other employment-related factors, such as benefits and annual leave.

The Labour Management Plan has explicit commitments to work in good faith with trade unions and any other employee group seeking formal representation. The document also states that, at a minimum, the Project will not prevent by any means the formation of trade unions or other legally establish worker groups and that OMAS and its contractors will comply with Turkish Labour Law concerning relations with authorized labour organisations and worker representatives.

In addition to the Labour Management Plan, mitigation for the potential negative impacts associated with direct employment are included in a package of human resources policies and procedures. The relevant details are described more below and the list includes:

- Human Resources Policy (OMAS-HR-POL-001);
- Respectful Workplace Policy (OMAS-HR-POL-002);
- Human Resources Policy and Procedure (OMAS-HR-PRC-001);
- Employee Grievance Procedure (OMAS-HR-PRC-002);
- Recruitment Policy and Procedure (OMAS-HR-PRC-003);
- Local Employment and Training Procedure (OMAS-HR-PRC-004).

The Human Resources Policy is based on the principles outlined by ILO Conventions, Human Resources Plans, Procedures and Codes of Conduct of Centerra Gold Inc. and as well as the requirements of Turkish Labour Law. Key elements of the document include OMAS commitments to:

- Meet or exceed all Turkish labour legislation, employment and safety laws and international standards;
- Maintain principles of non-discrimination and equal opportunity;
- Ensure fair remuneration and work conditions for all employees;
- Ensure that there is no use of forced, compulsory or child labour[58];
- Implement policies and practices designed to eliminate harassment and unfair discrimination in all aspects of its activities;
- Ensure the all staff, including security personnel, are provided with appropriate cultural and human rights training;
- Provide a safe and healthy work environment for all employees.

The Respectful Workplace Policy defines "harassment" in the workplace to be "*comment or conduct that is known, or ought reasonably to be known, to be unwelcome or offensive to a reasonable person. Harassment may be a series of events or a single incident*". Any such behaviour is forbidden, as is retaliation or reprisal against any employee who files a complaint alleging harassment. The consideration of harassment explicitly covers "sexual" and "personal" harassment and provides examples of conduct considered unacceptable. The policy confirms that any complaint will respect confidentiality to the extent possible within the investigation process and further outlines how reporting and investigation should be conducted.

The purpose of the Human Resources Policy and Procedure is to identify working methods, periods, procedures, and principles of paid and unpaid leave of workers employed by the company under a formal employment agreement / contract, and to define the rights and responsibilities of all supervisors and employees. This confirms the primary and vital importance of written employee agreements in accordance with Turkish Labour Law, No. 4857 and ILO regulations. Each employee should expect to

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[58] The Labour Management Plan stipulates that all applicants for employment must be 18 years of age on the date of hire for all positions.

receive and sign an Employment Agreement, which enables the company to complete required social security applications with the Ministry of Labour. Such agreements vary in terms and clauses affected by job grade and benefit level. Key elements of the policy include:

- Work Methods and Working Hours (including procedures on overtime);
- Medical examinations;
- Safety and security;
- Termination;
- Confidentiality.

The Human Resources Policy and Procedure outlines employee benefits and highlights the importance of the Employee Grievance Procedure.

The Employee Grievance Procedure aims to provide all employees with a uniform process for the resolution of employment concerns not addressed by other existing human resources policy and plans. The procedure has been developed for situations in which an employee believes that the fair and consistent application of a policy affecting him or her has not been followed and that employee has been unable to resolve the issue within a particular work area or group. This alternative vehicle is offered with the commitment that no employee shall be subjected to discrimination or adverse treatment for participating in a grievance procedure.

The purpose of the Recruitment Policy and Procedure is to provide guidelines on a structured, formal process to recruit new employees who exhibit the necessary levels of qualifications, skills and knowledge. This document reiterates that OMAS will treat all persons equally and will not discriminate against any suitably qualified person on any grounds of colour, ethnic origin or nationality, marital status, sex, age, pregnancy, family responsibilities, religious or political conviction, and physical or intellectual impairment. The document includes procedures for new hiring, advertising new positions, interviewing and checking references.

Household surveys in two settlements nearest to the Project indicate that education and literacy levels in the social study area and municipality are generally low[59]. Low education levels in the neighbourhoods suggests there may be a potential challenge to meet targets for local employment. As such, the Project is planning for local employment, selection and training to be operational commencing by mid-2016.

The Local Employment and Training Procedure is a key document in seeking to maximize the opportunities for local employment and ensuring a fair distribution of jobs to all nearby settlements. Targets in Table 14-12 are supported by the Local Employment and Training Procedure, which includes employment qualification criteria, to ensure that preferential employment will be given to qualified local people who can provide evidence that they have been resident in the Develi area for at least 6 months, and documentation to support fair and transparent recruitment processes. Hiring preference criteria will prioritize settlements directly affected by the current activities of the company will have priority, followed by workers in the Develi District and then the province (Kayseri) which is nearby to the project site. Turkish nationals will always be given priority over expatriates, who will only be used where their particular skills and experience cannot be supplied by Turkish nationals. Recruitment procedures are detailed for unskilled / semi-skilled and skilled positions and include a standard scoring system.

In addition to setting targets, OMAS commits to providing training for residents who would like to find employment. The objectives of the trainings will be to remove barriers for residents who wish to work for the Project and to raise local skill levels. OMAS has commenced planning for internal and external vocational training with the National Education Centre. Specific courses have been identified, including in trades. Training will commence upon confirmation of OMAS specific skills requirements to ensure work readiness of graduates and to facilitate a pathway to employment for direct and indirect employment.

[59] Based on Öksüt and Zile household survey information.

The Local Employment and Training Procedure states that the company's and contractor employment processes are open to independent third party inspections including NGOs, local universities and the Ministry of Labour.

OMAS has committed to working with the EBRD and the Government to identify opportunities to increase women's participation in the Project. Opportunities for women in mining are often predominantly in unskilled or semi-skilled roles (such as catering and housekeeping), however these will be limited at the Project with no mine camp facilities and a small administration centre. The Project will also explore opportunities for induced employment to support local enterprises that support employment for women, such as in carpet making, a prominent industry in Kayseri.

The Labour Management Plan aligns potential collective redundancies with EBRD Performance Requirement 2, which is linked to Article 1 of EU Directive 98/59. In such cases where retrenchment meets the threshold outlined in the EU Directive, a formal Redundancy Plan will be prepared for consultation with workers.

OMAS will comply with its obligations under Turkish Labour Law, which stipulates that an employer with over fifty employees within a province must maintain a ratio of 6% for people with disabilities, ex-convicts and victims of terror, with at least 3% being people with disabilities. If the ratio is not met through the existing recruitment practices, OMAS will engage with the Turkish Employment Organisation (İş-Kur) to identify more candidates.

Residual Effects

The policies and procedures related to human resources cover all key elements of EBRD Performance Requirement 2 on Labour and Working Conditions. Such policies are expected to provide more predictable employment opportunities for direct employees and to set an example of good practice in the region. For these reasons, the residual effects of direct employment is **major beneficial.**

Changes in Indirect Employment

Impact Assessment

Impact	Changes in indirect employment (with contractors)
Receptor Sensitivity	High
Impact Magnitude	Direct, long term, widespread and certain to occur. Low impact magnitude
Significance	**Minor beneficial**

As explained in *Chapter 5: Project Description*, contract mining will be used at Öksüt. All mine planning, surveying, and ore control activities will be the responsibility of OMAS. The mining contractor will be responsible for:

- All direct operating costs, equipment and maintenance;
- Consumables such as fuel, explosives and capital related to the mining operation;
- Activities associated with mining including drill & blast, loading, hauling, road and dump maintenance;
- Supervision of their own personnel;
- Estimating and supplying the equipment required to meet the mining plan supplied by OMAS.

Estimated figures for the number of indirect workers to be employed through contractors is provided above in Table 14-11: Project workforce estimates. The indirect employment – estimated at 350 people during construction and 300 during operations – is similar to the impact of direct employees. The provision of salaried employment is considered a positive impact with high sensitivity. The impact is direct, long term, will extend beyond the local area and is certain to occur. However, indirect employment differs from direct employees in the company's ability to manage and influence contractor or third party workers. This is the primary reason for considering direct and indirect employment as separate impact topics. Similar to direct employment, the magnitude of indirect employment is considered low prior to the application of contractor management policies and procedures. Significance is minor beneficial.

Impact Mitigation

Major contractors are expected to have their own environment and community relations managers. They will work within the Framework of the OMAS ESMS and in coordination with the OMAS Community Relations Manager. Contractor compliances will be monitored by Project Manager and Mine Operations Manager in cooperation with Health, Safety, Environment and Training Manager, Human Resources Manager and Community Relations Manager on site.

The OMAS Labour Management Plan commits to ensuring compliance of contractor and sub-contractors working at the Project with the provisions of:

- Turkish Labour Law;
- Ratified ILO Conventions;
- EBRD Performance Requirement 2 – Labour and Working Conditions.

The Labour Management Plan requires contractors to implement equivalent recruitment procedures to its own and to have all associated documentation in place. It stipulates that contractors and sub-contractors are required to document the duration of employment, ensuring that the length of assignment for each temporary position is specified and clear.

The Labour Management Plan also requires all remuneration to be in accordance with OMAS human resources policies with salary conditions clearly set in a contract employee's contract.

The Project has developed several other documents to assist in the management of its contractors. They include:

- Contractor Management Framework (OMAS-ESMS-CM-PLN-001);
- Recruitment Procedure for Contractors (OMAS-HR-PRC-005).

The Contractor Management Framework summarises the contractor engagement procedures and systems used link contractors directly into the overall management system. It is based on the OMAS Environmental and Social Management System Framework. All contractors are subject to inspection and audit by OMAS prior to a contractors initial appointment and on an annual basis, as outlined in the Contractor Management Framework.

The Recruitment Procedure for Contractors reiterates that all contractors will be responsible to implement the procedure in accordance with OMAS HSE and Sustainability policies during recruitment. Other key aspects include steps for contractors to:

- Retain any documentation prepared in association with recruitment for 12 months from the time of each applicant appointment;
- Provide written contracts;
- Comply with key international laws on human rights, specifically related to:
  - Forced labour
  - Freedom of Association
  - Equal remuneration for men and women
  - Non-discrimination
  - Minimum age
- Formally inform contractor employees of their right to use the OMAS grievance tools;
- Maintain a written log of all employment-related grievances with details of the complaint, results of the investigation, outcome and all communications related to an incident.

The overall alignment of contractor management of human resources with OMAS policies and procedures is an important key message that will be conveyed to settlements near the Project site. Consultation with the community has revealed that many consider they will not be in a position to meet the minimum requirements for employment with OMAS, but consider that contractors to the Project will have lower minimum requirements which will enable their employment. Ongoing stakeholder engagement will provide for updated materials and information sharing from OMAS Community Relations with settlement residents and training partners to facilitate a work-ready pool of employees and ensure any potential applicant understand they should be subject to equal treatment regardless of their status as a Permanent or Temporary (Contractor) worker.

Residual Effects

OMAS have developed and put into practice numerous policies and procedures related to their contractors' management of human resources impacts. As with direct employment, these cover all key elements of EBRD Performance Requirement 2 on Labour and Working Conditions. Also like direct employment, the impact can be expected to improve, however the challenge of monitoring and management of separate companies lessens the expected Project benefit. The residual impact of indirect employment is **moderate beneficial**.

Changes in Procurement of Goods and Services

Impact Assessment

Impact	Changes in procurement
Receptor Sensitivity	High
Impact Magnitude	Direct, long term, widespread and certain to occur. Low impact magnitude
Significance	**Minor beneficial**

Procurement of goods and services is another impact topic that will be positive. While the effect will be greatest during the construction phase, the need for good and services will continue through operations and closure.

The Project is estimated to have a total spend of USD $560 million in Turkey over the life of the mine (excluding taxes and financing), which is approximately 86% of the total Project. It should be noted that these estimates assume any contract with a Turkish company is considered local spend, even if the local entity will be required to procure goods or equipment from abroad.

Table 14-13: Estimated Project Spend in Turkey over mine life[60]

	USD $, million
Direct Costs	
Mining	130.25
Processing	108.1
Administration	53.9
Refining	3.0
Royalties (State, Stratex, and Teck)	17.6
Total OPEX (excludes capital stripping)	378.2
Capital Costs	
Sustaining Capital (includes capitalized stripping)[61]	37.9
Construction Capital (includes contingency)	183.9
Reclamation	24.3
Net Change in Working Capital	0.0
Total Capital Costs (incl. Reclamation)	**271.3**

The total initial capital cost of the mine is USD $190,785,000 while the total mine construction cost is USD $36,568,000.

The exact figures for good and services purchased are not available, but the investment of millions of dollars can be considered to be similar to other economic impacts – a positive impact with high sensitivity. The impact is direct, long term and will extend beyond the local area. Like employment, there will efforts to keep this impact as "local" as possible. Procurement is similar to other impacts in that the purchasing of goods, while adding to the economy, can have negative effects if not managed transparently and fairly. For these reasons, the magnitude of procurement is considered low prior to mitigation. Significance is minor beneficial.

Impact Mitigation

Four geographic zones have been identified by OMAS for the purpose of classifying suppliers and contractors, goods and services. These zones are defined as follows:

- Zone 1: Priority settlements included in the social study area and Develi municipality;
- Zone 2: Kayseri city and province;
- Zone 3: Turkey (nationally);
- Zone 4: International (outside Turkey).

The majority of the total Project spend will be made in Turkey nationally and OMAS has identified items which it intends to procure nationally (i.e. from Zone 3):

- Diesel will be supplied from one of the major oil companies in Turkey, most probably within a long-term purchase and dealership agreement.

The following items will be procured locally (i.e. from Zone 1), as follows:

- Civil works contracts and materials;
- Maintenance and repair of cars and heavy equipment;

[60] Source: OMAS, based on Total Spend model. Note that these figures are slightly different to those presented in the 43-101 due to a different treatment and presentation of the information derived from the financial model for the Project.
[61] Covers the capitalized stripping activities, waste stockpile and heap leach pad construction costs, road construction, pasture land and forestry land fees, process plant equipment, and other related infrastructures and utilities

- Transportation services for the mine workforce;
- Car rentals;
- Fuel for vehicles;
- Catering services for the mine workforce;
- Office furniture;
- Stationery;
- Cleaning and laundry services.

OMAS has established its Procurement of Goods and Services Policy and Procedure (OMAS-FIN-PRC-001) to provide the framework for authorised acquisitions in a timely, cost effected and controlled manner that secures value for money for OMAS. It also ensures procurement is undertaken in accordance with the Company's Code of Ethics Policy (OMAS-GEN-POL-001). Guidelines for procurement seek to maximise the local supply of goods and services (according to the above Zones), enable local firms to tender competitively, and give priority for local firms and individuals where they can ensure that prices are competitive, quality can be maintained, and periodicity of supply can be maintained.

Three specific principles have been established by OMAS in implementing its Procurement policy as it will apply to the main contractors (i.e. the Construction Contractor and the Contract Miner), as follows:

- Top priority is given to local bidders where bids are qualified and competitive in accordance with the tender conditions;
- Local employment is promoted through negotiating local employment targets that are appropriate to the services to be provided and the available appropriately skilled labour; contracts will include contractual commitments on locally employed unskilled labour;
- Local procurement is promoted through negotiated local procurement targets appropriate to the services to be provided and the available supply of goods / services; contracts will include contractual commitments on local procurement.

Thus, while the two major contracts are not tied to any specific Zone, these contractors will be required to deliver on the negotiated local procurement and local employment requirements as a standard, in addition to specific contract terms. In the case of the Contract Miner, specific terms include:

- Estimating and supplying the equipment required to deliver the mine plan, including labour,
- Provision of consumables to deliver the contract.

OMAS has a Local Sourcing Committee consisting of the General Manager, Director of Finance, Director of External Affairs and Sustainability and Mine Operations Manager. The main duties of the committee are the formation of strategy, and the identification, assessment, and decision-making about those community issues directly related to contracting and purchasing.

The Labour Management Plan includes additional requirements as it relates to the supply chain, and area of procurement that can have both positive and negative impacts if not properly monitored. As part of supply chain management, the Plan states that all suppliers will follow national labour laws, ILO standards and EBRD Performance Requirement 4 on Health and Safety. Minimum supplier standards are set and include:

- Supplier Standards for Employment to comply with national law, and to prohibit the employment of forced, bonded or child labour and to maintain a process to assure compliance;
- Supplier Standards for Human Rights to respect basic human rights and dignity, without distinction on any basis and to maintain a process to assure compliance;

- Supplier Standards for Health and Safety to maintain compliance with all Health, Safety and Environment (HSE) requirements of OMAS with a process for obtaining assurance on compliance with those policies by regular audits, reviews and reports;
- Supplier Standards for Community Relations to demonstrate organisational commitment to responsible and productive community relationships. This also includes that all suppliers pay specific attention to the management of their subcontractors.

Residual Effects
OMAS have a developed a set of commitments to increase or localise procurement and policies to maintain ethics and transparency. In addition, it has created a whistle-blower policy to identify corruption in cases where other policies have not been followed. These commitments and policies increase the benefits of expenditure, making the residual impact of procurement of good and services **major beneficial**.

Inflation in Local Economies

Impact Assessment

Impact	Inflation in local economies
Receptor Sensitivity	Medium
Impact Magnitude	Indirect, medium term, localised and likely to occur. Medium impact magnitude
Significance	**Moderate adverse**

Local price inflation is a complex adverse indirect impact from the Project and can be the negative result of some of the positive economic impacts like employment and procurement. Inflation can be linked to increased demand for local products or housing. There can also be inflation of wages, a dynamic that benefits those receiving employment, but creating a negative impact for farms or other economic livelihoods that may compete for lower skilled workers. Although the overall population will increase only very slightly in Develi, this group will be wealthier, and will be able to pay more for accommodation, goods and services, and have greater disposable income, compared to the existing population. Inflationary effects disproportionately affect the cost of living for non-Project employees, in particular those on fixed incomes.

Attribution of inflation to one source, like the mine, is difficult as other dynamics can also affect the cost of goods, services and labour. In addition, local economies can adapt, produce or bring in more goods or build news housing. Because of the ability to adapt, receptor sensitivity is considered to be medium. Inflation is an indirect impact and medium term – increased prices will likely cause the adaptation mentioned above. The extent is localised and likely to occur. The significance is moderate adverse.

Mitigation
The negative impacts of inflation are difficult to predict. OMAS will assess inflationary impacts through is regular consultation to be managed by the Director for External Affairs and Sustainability. If feedback includes comments about a rise in prices, a more formal monitoring system will be set up to monitor prices for staple goods on a monthly basis. This will be done in the rural settlements, as well as in other areas of the Develi Municipality to determine if inflation is a localised impact related to the Project or may have other causes.

If inflation can be linked to the project, OMAS will consider targeted support programmes to less demand or increase supply for good and services. The management of inflation is underpinned by the stakeholder engagement efforts that aim to make feedback on such topics as easy as possible for all residents in the in the study area.

Residual Effects
Following mitigation, there remains a potential for **a minor adverse** residual effect.

14.7.2 Summary of Impacts and Mitigation Measures

A summary of potential impacts and proposed mitigation measures as described above are summarised in the Tables below.

Table 14-14: Construction and Operations Phase Impacts and Mitigation Measures

Impact	Receptor	Receptor Sensitivity	Impact Categorisation	Magnitude of Impact	Potential Effect Significance	Design and Mitigation Measures	Management Plans, Policies and Procedures	Residual Effect Significance
Changes in tax revenue	National, Regional and Municipal Government	High	Direct Long term Widespread Certain to occur	Low	**Minor beneficial**	▪ Disclose tax payments in support of the principles of the EITI.	▪ Stakeholder Engagement Plan	**Moderate beneficial**
Changes in direct employment	Region of Kayseri	High	Direct Long term Widespread Certain to occur	Low	**Minor beneficial**	▪ Maximise local employment, as defined in Local Employment and Training Procedure. ▪ Adhere to Labour Management Plan and human resources policies that seek to establish fair, transparent and equal opportunity employment. ▪ Identify opportunities to increase women's employment.	▪ Labour Management Plan ▪ Human Resources Policy ▪ Respectful Workplace Policy ▪ Human Resources Policy and Procedure ▪ Employee Grievance Procedure ▪ Recruitment Policy and Procedure ▪ Local Employment and Training Procedure ▪ Stakeholder Engagement Plan	**Major beneficial**

Impact	Receptor	Receptor Sensitivity	Impact Categorisation	Magnitude of Impact	Potential Effect Significance	Design and Mitigation Measures	Management Plans, Policies and Procedures	Residual Effect Significance
Changes in indirect employment	Region of Kayseri	High	Direct Long term Widespread Certain to occur	Low	**Minor beneficial**	▪ Maximise local employment, as defined in Local Employment and Training Procedure. ▪ Adhere to Labour Management Plan and human resources policies that seek to establish fair, transparent and equal opportunity employment within third party contractors. ▪ Adhere to Contractor Management Framework and Recruitment Procedure for Contractors. ▪ Identify opportunities to increase women's employment.	▪ Labour Management Plan ▪ Contractor Management Plan ▪ Recruitment Procedure for Contractors ▪ Employee Grievance Procedure ▪ Stakeholder Engagement Plan	**Moderate beneficial**
Changes in procurement	Region of Kayseri	High	Direct Long term Widespread Certain to occur	Low	**Minor beneficial**	▪ Maximise local procurement, as defined in the Procurement of Good and Services Policy. ▪ Adhere to Company Code of Ethics Policy. ▪ Maintain the Local Sourcing Committee to update strategy on contracting and purchasing.	▪ Procurement of Goods and Services Policy ▪ Code of Ethics Policy ▪ Stakeholder Engagement Plan	**Major beneficial**
Inflation in local economies	All neighbour-hoods	Medium	Indirect Medium term	Medium	**Moderate adverse**	▪ Assess inflationary impacts through regular consultation.	▪ Stakeholder Engagement Plan	**Minor adverse**

Impact	Receptor	Receptor Sensitivity	Impact Categorisation	Magnitude of Impact	Potential Effect Significance	Design and Mitigation Measures	Management Plans, Policies and Procedures	Residual Effect Significance
			Localise Likely to occur			▪ If there is a reported rise in prices, establish a formal monitoring system of prices for staple goods.		

14.8 Monitoring Requirements

The following Table 14-15 specifies the monitoring requirements for this aspect.

Table 14-15: Economics Monitoring Requirements

Source Document	Monitoring Location	Parameters	Frequency
Stakeholder Engagement Plan **OMAS-ESMS-SEP-PLN-001**	▪ CR Office ▪ Communities	▪ Stakeholder Engagement Register ▪ Grievance register ▪ Commitments audit records ▪ Survey results with key stakeholders	Ongoing and monthly reviews Annual reporting for life of mine
Community Development Management Plan **OMAS-ESMS-CD-PLN-001**	▪ CR Office ▪ Communities	▪ Stakeholder Engagement Register ▪ Grievance register ▪ Commitments audit records ▪ Survey results with key stakeholders	Ongoing and monthly reviews Annual reporting for life of mine
Local Employment and Training Procedure **OMAS-HR-PRC-002**	▪ OMAS offices ▪ Contractor offices ▪ Site ▪ Communities	▪ Contracts ▪ Training Records ▪ Employment records ▪ Incident records ▪ Grievance Records ▪ Recruitment records	Ongoing and monthly reviews Annual reporting for Construction and Operations
Procurement of Goods and Services Policy and Procedure **OMAS-GEN-POL-001**	▪ OMAS offices ▪ Contractor offices ▪ Site ▪ Communities	▪ Contracts ▪ Training Records ▪ Employment records ▪ Incident records ▪ Grievance Records ▪ Recruitment records	Ongoing and monthly reviews Annual reporting for Construction and Operations