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Operation to Ensure Sustainable Integration of Disadvantaged People in the TRB1 Region into the Labor Force

EuropeAid/140635/IH/SER/TR

Activity 4.1

TRB1 Region (Malatya, Elazığ, Bingöl, Tunceli)

Labor Market Analysis Report

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TRB1 Region (Malatya, Elazığ, Bingöl, Tunceli) Labor Market Analysis Report

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Abbreviations

Abbreviation	Description
EU	European Union
EUROSTAT	European Community Statistical Office
FKA	Fırat Development Agency
GDP	Gross Domestic Product
NUTS	Statistical Regional Units Classification
NUTS-1	Nomenclature of Territorial Units for Statistics - Level 1
NUTS-2	Nomenclature of Territorial Units for Statistics - Level 2
NUTS-3	Nomenclature of Territorial Units for Statistics - Level 3
ILO	International Labor Organization
İŞKUR	Turkish Employment Agency General Directorate
MYO	Vocational School
TRB1	Malatya, Elazığ, Bingöl, Tunceli
SSI	Social Security Institution
TURKSTAT	Turkish Statistical Institute

Executive Summary

Presentation

Within the scope of "Operation to Ensure Sustainable Integration of Disadvantaged People in the TRB1 Region into the Labor force" and with the ultimate goal of revealing the relationship between demand and supply in the labor market, "TRB1 Region Labor Market Analysis Report" was prepared by Research and Analysis Specialist, Education and Employment Research and Analysis Senior Specialist and Entrepreneurship and Labor Market Research and Analysis Senior Specialist.

Introduction (Objectives, Scope)

This study was prepared under the activity "Report on the Employment of Target Groups" within the scope of the technical assistance project aiming to improve the vocational skills and increasing the employability of women and young people who are in poverty or at risk of poverty in the TRB1 Region, increase the institutional capacity of the Fırat Development Agency (FKA) and relevant institutions, and reach a wide audience through awareness campaigns/events on women and youth employment. The report covers the profile of target groups in the region, employment opportunities and analysis of the differences between the expectations of the labor market and the qualifications of job seekers.

Method (Data Collection Population, Measurement Method, Analysis Method)

Within the scope of the study, field work was carried out, including desk study, in-depth interviews and focus group meetings.

During the desk study, reports related to the subject and the region were studied and current data were analyzed. In the second half of the activity, a field study was carried out. Qualitative research methods were used during the field study. In light of the literature, the team conducted in-depth interviews and focus group meetings with target groups, which mostly included young people and women.

Qualitative research methods provide the researcher with comprehensive insight into the lived world from the subjects' perspective. According to Uwe Flick, qualitative research is designed to approach the world 'out there' (rather than in specialized settings such as laboratories) and understand, describe and sometimes explain social phenomena 'from the inside' in a number of different ways. Additionally, in-depth interviews conducted in the context of qualitative research were found to be suitable for people's efforts to understand the world they live in, to comprehend themselves and their experiences, and to explain and detail their experiences about the world. [1]Focus group discussions allow to collect in detail the beliefs, attitudes, and expectations on a particular topic from the perspective of participants with a similar background and/or experience. Additionally, qualitative research methods do not aim to directly represent the entire research universe; instead, it seeks to represent the diversity of different experiences.

Results

As a result of desk work, although there is a need for labor in the agricultural sector or low value-added sectors in the region, considering national and international trends and upper-scale policies, it is possible to shift employment and trained human capital in these sectors to high value-added sub-sectors in the manufacturing and services sectors. It has been observed that it will significantly increase the competitiveness of the region and the added value that the region will create.

When the workplace and employment statistics of the region are examined on a sectoral basis, the three sectors that stand out are: textile and ready-made clothing, food products and non-metallic mineral products manufacturing sectors.

During the field study, in-depth interviews and focus group meetings were held with university students, new graduates, young people who are neither in education nor in employment, women, and disabled people. In addition, the same meetings were repeated with private sector representatives in the region. As a result of these, in addition to the three sectors mentioned above; graphic design, software development and coding, machinery manufacturing, machinery maintenance and repair sectors and foreign trade have come to the fore in terms of employment opportunities.

Graphic design sectors stand out with the opportunity to work with almost all sectors and with the fact that they do not require a specific office layout. The sector in question has the potential to produce added value as it gives young people in the region the opportunity to work in regional cities in an integrated manner with the world. However, the foreign language prerequisite required to be successful in this sector makes it difficult for young people in the region to participate in the sector. Foreign language learning support is essential for the development of the sector.

The software development/coding sector also offers similar opportunities to the graphic design/design sectors. The high labor demand in the sector increases the attractiveness of these areas. However, similar obstacles such as insufficient foreign language skills also exist in this sector.

[1]Kvale, 2007: 46

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The machinery manufacturing sector and the machinery maintenance sector are important in terms of their mutual relationship with other sectors and their power to activate the advanced technology potential in the region. However, similar obstacles such as lack of necessary competencies for trained engineers and inadequacy of foreign language skills also exist in this sector.

Foreign trade is of great importance for the development of the region, and obstacles such as insufficient foreign language skills also occur in this sector.

As a result of all these studies, the strengths and weaknesses of the sector are stated below.

Positive Sides

- Conscious young population
- The ability of the local people to express themselves
- The desire of universities/Vocational Schools (Vocational Schools) and faculty members in the region for change and development
- Investment incentives
- Potential in the manufacturing industry
- Labor force incentives
- Entrepreneurial motivation

Negative Sides

- Lack of motivation of local people
- Lack of good practice examples (region specific)
- Length of university and vocational school education
- No guarantee of employment after graduation
- Inconsistency in the effective application of theoretical training received in vocational schools in the industry
- Problem finding a job after age 45
- Lack of job opportunities and poor working conditions for young people in the region (inflexible working hours, lack of career management, insufficient minimum wage)
- High worker turnover and increasing tendency towards seasonal work
- Limited job opportunities directly related to the department studied
- Lack of internship opportunities
- The prominent sectors in the region are not known by young people
- Distrust in society regarding the quality of vocational training
- Difficulty in allocating additional resources to support existing education
- Foreign language barrier
- Lack of information about different career opportunities and jobs of the future

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- Concerns about social life
- Not being able to access education/incentive information in the region via social media
- Inability to access sufficient information about entrepreneurship
- Lack of development of digital skills
- Women cannot find employment in industry
- Lack of access to sufficient information about entrepreneurship for women
- Preschool problem
- Restrictions in women's social lives due to workload at home
- Difficulty in allocating financial resources to support current education
- The education that disabled people can receive mostly focuses on handicrafts.
- Employment opportunities for disabled people are limited to government incentives and insufficient private sector incentives.
- Career paths are blocked due to disabled people not being directed to high value-added professions and deficiencies in encouraging the employment of disabled employees.

Suggestions

- Various strategies and investments need to be implemented in order to increase the competitiveness of the sectors in the region, strengthen production capacities, improve business processes and generally support economic growth in the region.
- It is necessary to increase people's effective use of social media in order to raise awareness about vocational training and employment incentives and to access current information in the field of education and employment.
- Efforts should be made to address society's concerns about the content and capacity of vocational education.
- Students' participation in vocational training and social activities such as fairs, panels and workshops related to training, extra grades, etc. should be encouraged in various ways.
- Best practices from the region should be actively disseminated to the society.

Table 1: Training Needs Matrix

Suggestions about Training Content	Finding Revealing the Need for Training (Based on Which Finding?)	Purposes and Targets to which it Contributes (What Purpose Does It Serve?)	Recommendations on the Method of Implementation of Training	Suggestions on Instructor Profile
Trainings related to textile manufacturing sector	Desktop research	Result 1: Improvement of vocational skills of women and youth in poverty or at risk of poverty in TRB1 Region (Malatya, Elazığ, Bingöl, Tunceli)	In addition to practical trainings, theoretical trainings where the latest regulations and laws are analysed are also recommended.	It is recommended to work with trainers who know the region and can contribute to the development of the region.
Trainings related to the manufacturing industry sector	Desktop research	Result 1	Practical training and the "training of trainers" method are recommended.	It is recommended to work with trainers who know the region and can contribute to the development of the region.
Trainings related to the food products manufacturing sector	Desktop research	Result 1	In addition to practical trainings, theoretical trainings where the latest regulations and international standards are analysed are also recommended.	It is recommended to work with foreign trainers who know the sector.

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Software Development/Coding	Field work	Result 1	Organise bootcamps and workshops that offer the opportunity to work on real world projects.	It is recommended to work with instructors who have deep knowledge of current programming languages and development tools, have industry experience and can apply innovative teaching methodologies.
Machinery and Equipment Manufacturing	Field work	Result 1	Technical visits to manufacturing facilities in the region should be organised and internship programmes should be encouraged. Teaching innovative production techniques such as 3D printing and robotic manufacturing is gaining importance.	It is recommended to work with instructors who are experienced in manufacturing technologies and engineering principles, encourage hands-on teaching and follow industrial innovations.
Business Management (Export, accounting and finance etc.)	Field work	Result 1	Trainings should be given on the languages and cultures of the countries to be exported. Simulations should be made over realistic trade scenarios.	It is recommended to work with instructors with industry experience who are knowledgeable in international trade laws, financial management and accounting, marketing strategies and intercultural communication.

Tourism Oriented Service Sector	Field work	Result 1	Trainings that will increase service quality in tourism and emphasise the local cuisine culture of the region should be planned. Trainings on food safety, hygiene standards, healthy nutrition, customer relations should be provided.	It is recommended to work with instructors who are knowledgeable in hospitality management, hospitality industry management, culinary arts, water sports, hygiene standards and local cuisine culture and who can transfer practical culinary skills.

Chapter 1- Desk Work

Background and Background Studies

The "Classification of Territorial Units for Statistics (CUT)" is a statistical classification method created by the Statistical Office of the European Community (Eurostat) used for the collection, development and harmonization of European regional statistics, socioeconomic analysis of regions and the framing of EU regional policies[2]. Accordingly, Level 1 (NUTS-1) indicates major socioeconomic regions, Level 2 (NUTS-2) indicates basic regions for the implementation of regional policies and Level 3 (NUTS-3) indicates minor regions for specific diagnostics. In the Republic of Türkiye, the use of the Statistical Classification of Territorial Units method started within the scope of "Türkiye's National Program for the Adoption of the EU Acquis and Accession Partnership Document". Accordingly, it was decided to represent provinces at Level 3, and 26 Level 2 regions were formed by merging neighboring provinces. Providing an appropriate regional scale for national and regional analyses, Level 2 regions constitute the basis for the studies carried out in the EU candidacy process. Moreover, the regions that can benefit from structural funds within the scope of the convergence objective of the EU cohesion policy are determined at this level. In this context, in line with Eurostat's approach, Level 2 is considered as the basis for the implementation of regional policies.

One of the Level 2 regions is the statistical region called TRB1 or Malatya Subregion, which is located in the Central Eastern Anatolia Region in Türkiye. This statistical sub-region consists of four provinces: Malatya province (TRB11), Elâzığ province (TRB12), Bingöl province (TRB13) and Tunceli province (TRB14).

[2] Eurostat (2022)

Figure 1: TRB1 Statistical Subregion

Source: (General Directorate of Development Agencies, 2022)

Development agencies are organizations established to promote the development of a country or region, support economic growth, and increase social welfare. They are organizations that actively cooperate and support stakeholders across Türkiye in the fields of economic development, regional development, social development, innovation, and R&D and international cooperation. In the TRB1 2014-2023 Regional Plan prepared by Fırat Development Agency, which was established in 2009 and carries out its activities in the field of regional development, the vision of the region was determined as “TRB1 with a high quality of life, producing with an educated and entrepreneurial labor force”. The development axes that will lead the region to this vision are “quality of life” and “sustainable economy”. Under the first axis, quality of life, NGOs, economic cooperation, entrepreneurship culture, capacity of institutions and inter-institutional coordination, vocational training and sectoral needs, universities, active participation of women in social life and migration management, Development of Social and Human Capital and Improvement of Physical Infrastructure have been examined. Under the second axis, namely sustainable economy, the topics of Increasing Agricultural Production and Productivity, Developing Alternative Tourism Types, Strengthening Industrial Production and Effective Utilization of Energy and Mineral Assets were examined.

Figure 2: TRB1 2014-2023 Regional Plan, Development Axes

QUALITY OF LIFE AXIS

- Development of Social and Human Capital
- Improvement of Physical Infrastructure

SUSTAINABLE ECONOMY AXIS

- Increasing Agricultural Production and Efficiency
- Development of Alternative Tourism Types
- Strengthening Industrial Production
- Effective Use of Energy and Mineral Assets

Source: (Fırat Development Agency, 2023)

It has been emphasized that human capital is one of the most important pillars of national and regional development in the Regional Plan; and strengthening human capital through education is designed as the starting part of the approach where entrepreneurial individuals are raised both economically and socially and this human-focused power is transformed into production as the "vision" expression. Elevating the living standards in the TRB1 Region and making the region a preferred area by increasing the quality of life is indicated as other targeted elements in the vision expression to achieve the vision along the development axes mentioned above. The Operation for Sustainable Integration of Disadvantaged Individuals in the Labor Market in TRB1 Region, prepared by Firat Development Agency aiming to reach its vision in line with the development axes mentioned above, started to be implemented in 2021.

This work is prepared under the "Employment of Target Groups Report" activity carried out within the scope of the technical assistance project targeting the results of improving the vocational skills of women and youth in poverty or at risk of poverty in the TRB1 Region; increasing the institutional capacities of Firat Development Agency and relevant institutions to enhance the access of disadvantaged women and youth in the TRB1 Region to the labor market; and reaching a wide audience through awareness campaigns/activities on women and youth employment. The report will cover the profile of target groups in the region, employment opportunities, and the analysis of the difference in qualifications between the labor market and the unemployed within the framework of a gender-based approach.

General Population and Labor Force Structure of the Region

According to Eurostat 2021 data, approximately 2% of the country's population resides in the TRB1 Region. When looking at gender-based data, it is observed that 882,459 male and 881,078 female citizens live in the region. This also indicates that the distribution of female-male population in the region is in line with the national data.

Table 2: Populations of Türkiye and TRB1 Region

Populations of the European Union, Türkiye and TRB1 Region				
Country/Region	**Gender**	**Total Population (thousand people) (2021)**	**Population aged 15 and over (thousand people) (2021)**	**Ratio of population 15 and over to the total population (%)**
European Union 27 Countries- Total	Total	447.000	379.949	84,9
	Male	218.368	185.613	84,9
	Female	228.632	194.336	84,9
Türkiye-Total	Total	84.680	65.704	77,6
	Male	42.428	32.691	77,6
	Female	42.252	33.013	77,6
TRB1 Region- Total	Total	1.763	1.371	77,7
	Male	882	681	77,2
	Female	881	690	78,3

Source: (TURKSTAT, 2023)

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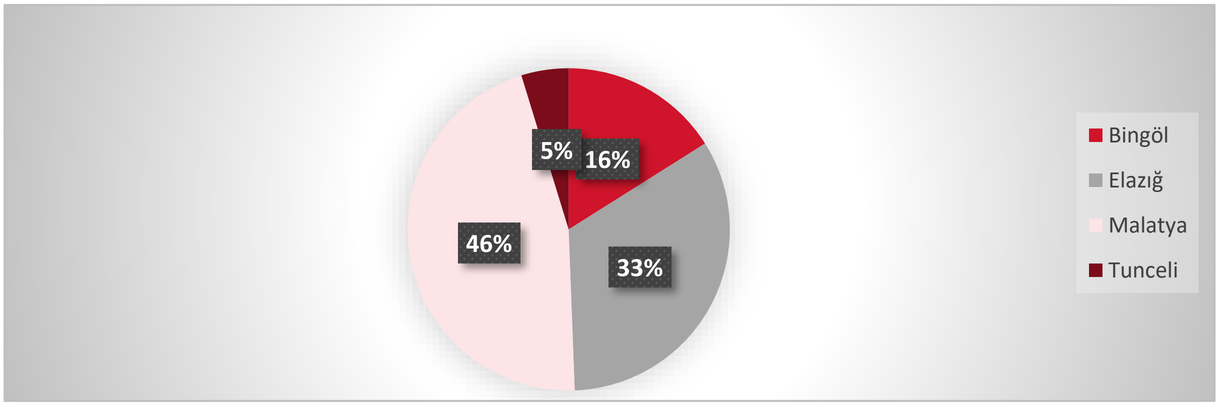
When looking at the provinces in the region, Malatya has the highest population with 808,692 people, representing 46% of the region's total population. This is followed by Elazığ with 33%, Bingöl with 16%, and Tunceli with 5%. Tunceli also stands out as the province with the lowest population in the country, with 83,645 people.

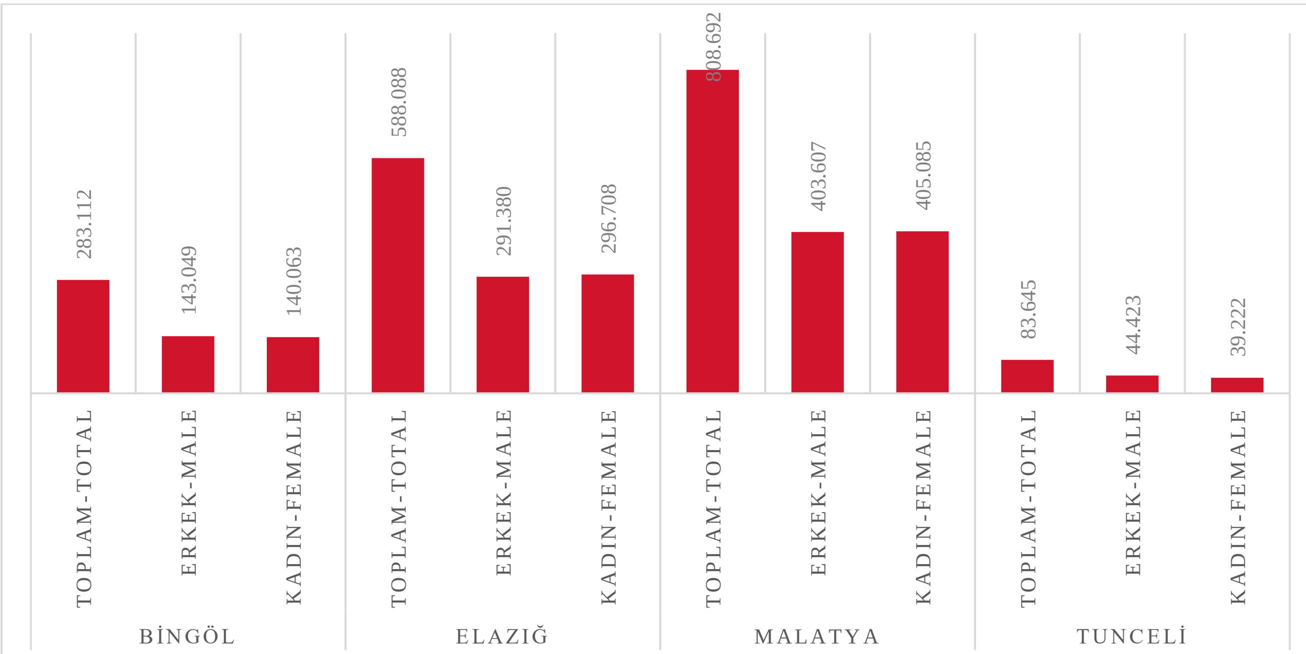
Chart 1: Population Distribution of TRB1 Region Provinces



Source: (TURKSTAT, 2022)

When the male-female population distribution in the TRB1 Region is analyzed, it is determined that the provinces of the region have a similar outlook to the region in general.

Chart 2: Population Distribution by TRB1 Region Provinces and Gender



Source: (TURKSTAT, 2022)

Basic population data can tell us a lot about public health, but it can also be an important measure of the labor market. For example, in their 2018 study, Bhalotra et al. argue that increases in the "live births" rate reduce the time women need to reach the target number of children. They conclude that reductions in child mortality increase women's labor force participation and improve their occupational status[3]. According to 2020 live birth data, TRB1 Region ranks 19th among 26 NUTS Level 2 regions.

On the other hand, a study[4] published by the European Commission found that an increase in household size increases the hours women have to spend at home and reduces their full-time participation in the labor force. According to the results of the Address Based Population Registration System revealed by TURKSTAT in 2021, the average household size in Türkiye is 3.23 persons. Although the average household size in TRB1 Region has been decreasing in the last five years, it has remained above the average of Türkiye except for

[3] Bhalotra, S. et all (2018)

[4] Özdemir, E. ve Ward, T. (2017)

Tunceli province. This situation reveals that Bingöl, Elazığ and Malatya are disadvantaged in women's labor force participation compared to many other provinces.

Although Malatya is the most populous province in the region, Bingöl has the highest annual population growth rate (per thousand) compared to other provinces in TRB1. This situation signals that more labor market quantitative supply and demand mismatches may emerge in Bingöl in the near term.

On the other hand, population density refers to the abundance of labor supply. Population density has a significant impact on economic growth[5]. In other words, abundant labor will contribute to the production of goods and services, thus increasing economic growth. While there are 110 people per square kilometer in Türkiye, the highest population density value in TRB1 Region is in Elazığ with 69.56. While this situation shows that the labor supply in the region is relatively low, it also reveals the disadvantage of the region in terms of economic growth.

When the population and migration rates for TRB1 region are analyzed, it is seen that Tunceli is the province with the highest migration. In 2022, TRB1 stands out as an emigrant region except Tunceli. It is estimated that one of the reasons for this situation is the mismatch between labor market supply and demand.

Table 3: Provincial Based Population Indicators

Bingöl	Average household size (person)	Annual population growth rate (per thousand)	Population density (number of people per square kilometer)	Net migration rate (per thousand)
2017	3,94	13,98	33,12	0,14
2018	3,89	28,32	34,07	12,72
2019	3,75	-4,97	33,9	-12,83
2020	3,66	6,97	34,14	-4,02
2021	3,57	4,76	34,3	-4,75
2022	3,42	-2,0	34,0	-10,7

[5] Rachmawati, L. (2017). How Can Population Density Affect Economic Growth? In Proceedings of the 2nd International Conference on Economic Education and Entrepreneurship, pages 411-415

Elazığ	Average household size (person)	Annual population growth rate (per thousand)	Population density (number of people per square kilometer)	Net migration rate (per thousand)
2017	3,52	8,4	69,03	-2,82
2018	3,54	20,3	70,45	9,77
2019	3,41	-7,65	69,91	-14,95
2020	3,33	-5,32	69,54	-9,54
2021	3,25	0,22	69,56	-2,77
2022	3,13	5,8	70,0	-2,0
Malatya	Average household size (person)	Annual population growth rate (per thousand)	Population density (number of people per square kilometer)	Net migration rate (per thousand)
2017	3,61	6,85	66,8	-0,89
2018	3,61	13,08	67,68	2,09
2019	3,53	3,92	67,95	-4,23
2020	3,49	7,46	68,46	1,08
2021	3,4	3,14	68,67	-3,97
2022	3,3	4,8	69,0	-1,70
Tunceli	Average household size (person)	Annual population growth rate (per thousand)	Population density (number of people per square kilometer)	Net migration rate (per thousand)
2017	2,73	3,7	11,1	-7,86
2018	2,76	66,81	11,87	62,28

2019	2,72	-40,94	11,39	-19,44
2020	2,66	-14,48	11,23	-6,21
2021	2,6	2,42	11,25	6,44
2022	2,54	8,6	11,0	6,0

Source: (TURKSTAT, 2021)

When Regional Labor Force Indicators[6] for 2020 are analyzed by TURKSTAT, it is seen that approximately 77% of the population of the region, as well as the country's population, is composed of the population aged 15 and above. This is approximately 85% in the European Union. The population distribution by gender in the region for this age group is similar to the population distribution by gender in the general population scale.

Looking at the 2022 labor force participation rates, it is understood that the difference observed in the labor force participation potential between the European Union, Türkiye and the region has closed. In 2022, while the labor force participation rate in the European Union is 58.0%[7], this rate is 53.1% and 48.0% in Türkiye and TRB1 Region, respectively. Among 26 Level 2 regions, TRB1 Region ranks 21st. In terms of employment and unemployment rates, TRB1 Region is 2 points below the national average. According to these rates, the region ranks 21st and 15th among 26 Level 2 regions, respectively.

Table 4: Türkiye and TRB1 Region TURKSTAT Regional Labor Force Indicators, 2021

TURKSTAT Regional Labor Force Indicators, 2021							
	Workforce (Thousand people)	**Employment (Thousand people)**	**Unemployed (Thousand people)**	**Those not included in the labor force (Thousand people)**	**Labor force participation rate (%)**	**Employment rate (%)**	**Unemployment rate (%)**

[6] The number of employed, unemployed and not in the labor force is calculated by considering the labor force participation rate, employment rate and unemployment rate published by the World Bank.

[7] The Worlbank, Labor force participation rate. January 5, 2024. Retrieved from https://data.worldbank.org/indicator/SL.TLF.CACT.ZS?locations=EU.

EU[8]	216.788	198.785	15.175	158.278	57,8	53	7
Türkiye	32.716	28.797	3.919	30.989	51,4	45,2	12,0
TRB1	653	587	67	699	48,3	43,4	10,2

Source: (TURKSTAT, 2021)

According to 2022 TURKSTAT Regional Labor Force Indicators, it is seen that the employment rate for both women and men in the region increased compared to the previous year.

Table 5: TRB1 Region TURKSTAT Regional Labor Force Indicators

	2021		
	Total	**Female**	**Male**
Employment rate (%)	43,4	25,9	61,4
Unemployment rate (%)	10,2	12,5	9,2
	2022		
	Total	**Female**	**Male**
Employment rate (%)	44,1	26,3	62,7
Unemployment rate (%)	8,1	11,3	6,7

Source: (TURKSTAT, 2021)

The reasons for not participating in the labor force were analyzed in a study conducted by TURKSTAT. In the study, when both total population and female population data are analyzed, the most common reason for not participating in the labor force in the country and the region is being busy with housework.

[8]The number of employed, unemployed and not included in the labor force was calculated by taking into account the labor force participation rate, employment rate and unemployment rates published by the World Bank.

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Table 6: Reasons for not being included in the labor force

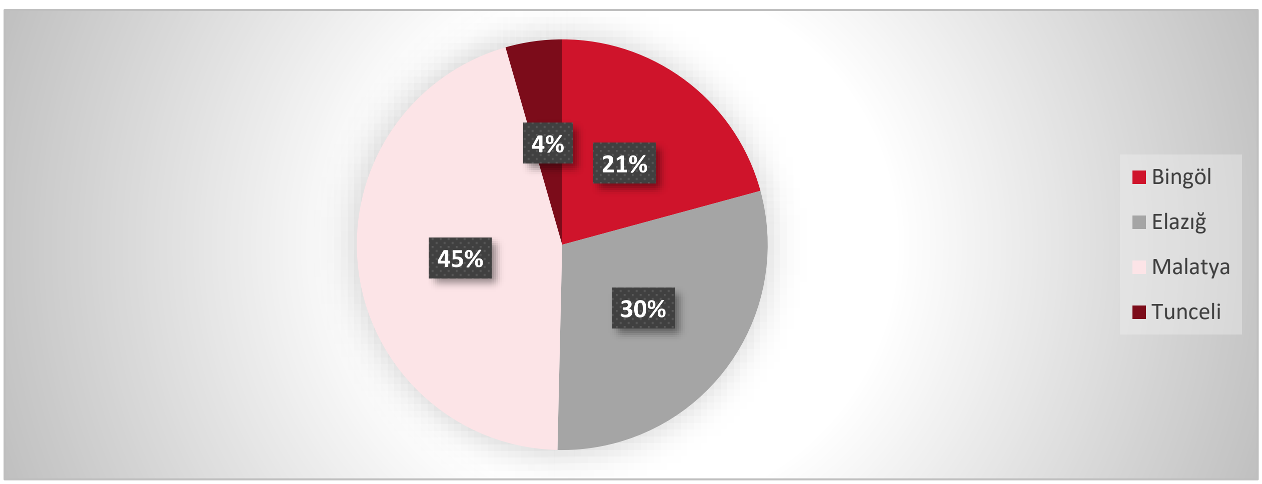
		Those not included in the workforce	Those who have no hope of finding a job	Those who can start work but are not	Those who are looking for a job and cannot start working	Busy with housework	Education	Retired	Unable to work	Other
2021 (thousand people)	Türkiye- Total Population Not Included in the Labor Force	30.989	1.629	1.546	100	9.917	4.879	4.995	4.998	2.925
	TRB1- Total Population Not Included in the Labor Force	699	66	31	1	235	126	87	106	47
	Türkiye- Total Female Population Not Included in the Labor Force	21.612	831	1.042	46	9.917	2.620	1.285	3.470	2.401
	TRB1- Female Population Not Included in the Labor Force	483	38	22	0	235	69	9	69	42
2022 (thousand people)	Türkiye- Total Population Not Included in the Labor Force	30.345	1.648	1.176	91	9.982	4.807	5.073	4.925	2.643
	TRB1- Total Population Not Included in the Labor Force	704	89	25	1	232	129	77	115	35

	Türkiye- Total Female Population Not Included in the Labor Force	21.200	878	831	49	9.982	2.622	1.281	3.389	2.169
	TRB1- Total Female Population Not Included in the Labor Force	486	49	16	0	232	69	9	79	31

Source: (TURKSTAT, 2023)

Although data on publicly available labor force participation rates for the province was not available, it is estimated that these data are close to the regional average. According to SSI 2022 data, 45% of the registered unemployed in the region reside in Malatya, followed by Elazığ with 30%, Bingöl with 21% and Tunceli with 4%.

Chart 3: Distribution of the Number of Registered Unemployed in TRB1 Provinces



Source: (SSI, 2022)

A comparison of the population distribution of provinces and the distribution of the number of registered unemployed shows that Elazığ maintains the same rate in the region according to both indicators. In Malatya and Tunceli, on the other hand, the rate of registered unemployed is lower than the rate of population distribution. The opposite situation is observed in Bingöl. Looking at the percentage of registered unemployed in the provinces in the region in relation to the total population, Bingöl ranks first with 7.47%.

This situation reveals that employment opportunities in Bingöl are more limited compared to the region in general. When we look at the percentage of registered unemployed in relation to the female population, Tunceli ranks at the top proportionally. It is estimated that the reason for this situation is the higher participation of women in the labor force in Tunceli.

Table 7: Unemployment Indicators by Province (2021-2022)

Province	Gender	Registered Unemployed Population (Ages 15-64) 2021	Percentage of Registered Unemployed Compared to Total Population	Registered Unemployed Population (Ages 15-64) 2022	Percentage of Registered Unemployed Compared to Total Population
Bingöl	Total	17.295	6,11%	21.121	7,475%
	Male	8.433	5,90%	10.096	3,573%
	Female	8.862	6,33%	11.025	3,902%
Elazığ	Total	27.618	4,70%	30.087	5,087%
	Male	13.634	4,68%	15.495	2,619%
	Female	13.984	4,71%	14.592	2,468%
Malatya	Total	35.107	4,34%	45.934	5,653%
	Male	16.891	4,19%	21.772	2,679%
	Female	18.216	4,50%	24.162	2,973%
Tunceli	Total	3.610	4,32%	4.524	5,362%
	Male	1.353	3,05%	2.813	3,334%
	Female	2.557	6,52%	1.711	2,027%
TRB1	TOTAL	83.630	19,47%	101.666	23,577%
TÜRKİYE	TOTAL	6.895.102	12,0%	6.041.648	10,4%

Source: (SSI, 2021-2022)

When the number of registered unemployed by provinces is analyzed by gender, it is seen that the number of female unemployed is higher than the number of male unemployed, especially in Elazığ and Tunceli

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provinces. This situation indicates that women in the region have difficulties in accessing jobs as well as labor force participation.

In 2021 and 2022, in parallel with each other, approximately 55% of the registered female unemployed population in Türkiye is composed of the young population between the ages of 15-29. This rate is 59% for the male population. Looking at the TRB1 average, it is seen that this rate is 45% for women and 57% for men.

Table 8: Number of Registered Unemployed Young Population (2021-2022)

		Registered Unemployed Young Population (15 – 29 years old)			TOTAL		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**
2021	TÜRKİYE GENERAL	937.488	804.324	1.741.812	1.588.633	1.578.080	3.166.713
	TRB1 Total	24.005	19.242	43.247	41.636	41.994	83,630
2022	TÜRKİYE GENERAL	2.044.000	1.538.000	3.582.000	1.926.000	1.711.000	3.637.000
	TRB1 Total	30.000	23.000	53.000	30.343	50.202	80.545

Source: (SSI, 2021)

According to the ILO, youth employment creates a significant opportunity for the labor sector in the regions. Businesses need skilled human capital to grow and develop, and the supply of young talent is critical for businesses to compete and grow in a competitive and rapidly changing environment[9]. Provincial data shows that Malatya has the highest number of registered unemployed youth in all genders, while Bingöl has the highest percentage of registered unemployed youth in relation to the total population.

[9] ILO (2022)

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Table 9: Registered Unemployment Indicators by Province (2021)

Province	Gender	Registered Unemployed Young Population (Ages 15-29), 2021	Percentage of Registered Unemployed Youth Compared to Total Population
Bingöl	Total	7.882	2.78%
	Male	4.198	2.93%
	Female	3.684	2.63%
Elazığ	Total	14.759	2.51%
	Male	8.200	2.81%
	Female	6.559	2.21%
Malatya	Total	19.279	2.38%
	Male	10.971	2.72%
	Female	8.308	2.05%
Tunceli	Total	1.327	1.59%
	Male	691	1.56%
	Female	636	1.62%

Source: (SSI, 2021)

Social Structure of the Region

According to the ILO, education and training are central to any effort to improve a country's productivity and to increase the likelihood that people not only have access to employment, but also have access to quality employment[10]. The level of education and skills base of the labor force has a clear impact both at the individual, regional and national level.

According to TURKSTAT Türkiye Net Schooling Rate data, the net schooling rate at primary school level is 93.2%, at secondary school level 88.9% and at secondary education level 87.9% in the 2020/ 2021 academic year[11]. Looking at the net enrollment rates at primary and secondary education levels in TRB1 Region, it is observed that Bingöl's secondary education participation rate for women is quite low compared

[10] Gammarano, R and Perardel, Y. (2016)

[11] TÜİK (2021)

to the Türkiye average, while Malatya's is quite high. A similar situation with Türkiye is observed for Tunceli and Elazığ.

Table 10: Schooling Rate by Province (2021)

Net Schooling Rate %						
	Years	**Bingöl**	**Elazığ**	**Malatya**	**Tunceli**	**Türkiye**
Males and Primary School	*2019*	91,78	92,73	94,02	92,37	93,7
	2020	92,67	92,37	93,73	91,93	93,3
	2021	92,16	92,93	94	92,07	93,2
Males and Primary Education	*2019*	97,42	97,79	98,25	95,46	97,6
	2020	92,85	93,32	94,05	92,49	94
	2021	93,68	93,48	94,56	93,28	94,4
Males and Secondary School	*2019*	96	96,72	96,7	95,69	95,7
	2020	86,01	88,11	89,09	88,69	89
	2021	88,4	88,67	90,13	90,45	90
Males and High School	*2019*	79,6	89,98	92,93	84,75	85,2
	2020	82,86	92,35	95,19	90,93	88,1
	2021	86,62	93,56	95,78	88,6	90
Females and Primary School	*2019*	91,45	92,35	94,03	91,77	93,5
	2020	92,4	92,26	93,65	92,29	93,1
	2021	91,14	92,2	94,08	91,12	93,1
Females and Primary Education	*2019*	97,37	98,1	98,64	94,76	97,8
	2020	93,24	92,93	93,98	92,51	93,8
	2021	93,09	93,23	94,37	92,17	94,2
Females and Secondary School	*2019*	96,01	97,21	97,57	93,64	96,1
	2020	87,07	87,45	88,99	89,22	88,7
	2021	87,8	88,3	89,95	89	89,7
Females and High School	*2019*	77,86	88,94	93,54	85,35	84,8

	2020	81,28	92,31	95,31	88,72	87,8
	2021	84,66	93	95,71	88,65	89,3

Source: (TURKSTAT, 2022)

As of 2023, five of the 208 universities in Türkiye within the scope of higher education are located in TRB1. Within the scope of these universities, 5,174 academics are working and approximately 16% of these academics have a professorship degree.

Table 11: University in TRB1 Region (2022)

TRB1 Region University, August 2022	
	Number of Universities
Türkiye	208
Bingöl	1 (Bingöl University)
Elazığ	1 (Fırat University)
Malatya	2 (Inönü University, Malatya Turgut Özal University)
Tunceli	1 (Munzur University)

Source: (Council of Higher Education, 2022)

According to YÖK's statistical database, there are 10,011 female professors in Türkiye. This number corresponds to 32.5% of the total number of professors in the country. According to YÖK's 2021 bulletin, the proportion of female professors in Türkiye surpasses EU countries with an average of 20.8% and is equal to the US with an average of 32.5%. Furthermore, with 45% female faculty members, Türkiye surpassed the EU average of 41.3% and the US average of 42.5%. In universities in the TRB1 Region, this rate is much lower than the national average. For example, there are no female professors at Bingöl University, while the number of female academics corresponds to only 26% of the total number of academics. On the other hand, the rate of female academics in the province of Tunceli in the region is higher than the Türkiye average.

Table 12: Number of Academicians Working at Universities in TRB1 Provinces (2022)

University	Established Date	Number of Professors			Number of Academicians		
		M	F	T	M	F	T

Bingöl University	29.05.2007	45	0	**45**	529	190	**719**
Firat University	11.04.1975	336	89	425	1.258	693	1.951
İnönü University	03.04.1975	266	74	340	1.025	616	1.641
Malatya Turgut Özal University	18.05.2018	25	3	28	220	152	372
Munzur University	22.05.2008	14	9	23	288	203	491
TOTAL		686	175	861	3.320	1.854	5.174

Source: (Council of Higher Education, 2022)

The majority of the 97,797 students in the region are enrolled in associate and bachelor's degree programs, while 10.7% are enrolled in a master's or doctoral program. Looking at the total number of students enrolled in undergraduate programs, it is seen that the number of female students enrolled in İnönü University and Munzur University is higher than the number of male students enrolled. In all other total data, the number of male students is higher.

Table 13: Number of University Students in TRB1 Provinces (2022)

Total Number of Higher Education Students in TRB1 Region		
Male (M)	Female (F)	Total (T)
51.403	46.394	97.797

University	Study Type	Associate Degree Program			Undergraduate Program		
		M	F	T	M	F	T
Bingöl University	*Total*	3.526	3.322	6.848	3.508	3.555	7.063
Firat University	*Total*	4.836	3.322	8.158	13.931	11.137	25.068
İnönü University	*Total*	2.536	2.322	4.858	11.680	13.211	24.891
Malatya Turgut Özal University	*Total*	1.947	1.394	3.341	764	571	1.335

Munzur University	*Total*	1.309	1.298	2.607	1.374	1.746	3.120
Total		14.154	11.658	25.812	31.257	30.220	61.477

University	Study Type	Master's Program			PhD Program		
		M	F	T	M	F	T
Bingöl University	*Total*	676	344	1.020	153	29	182
Firat University	*Total*	1.688	1.455	3.143	582	408	990
İnönü University	*Total*	1.678	1.451	3.129	761	544	1.305
Malatya Turgut Özal University	*Total*	88	68	156	11	6	17
Munzur University	*Total*	347	202	549	8	9	17
	Total	4.477	3.520	7.997	1.515	996	2.511

Source:(Council of Higher Education, 2022)

When the distribution of the unemployed in the region is analysed according to educational attainment, it is observed that primary education graduates are the highest number of unemployed in Bingöl, as in Turkey in general, while secondary education graduates are relatively more unemployed in other provinces[12].

Table 14: Distribution of the Unemployed by Education Level

Provinces	**Illiterate People**			**Those Who Are Literate**			**Primary education**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**

[12] SSI Statistical Yearbook (2021)

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BİNGÖL	128	294	422	970	2.350	3.320	3.191	3.064	6.255
ELAZIĞ	161	625	786	270	680	950	4.010	4.664	8.674
MALATYA	62	81	143	460	417	877	5.993	5.169	11.162
TUNCELİ	13	36	49	30	53	83	370	723	1.093
TÜRKİYE	41.760	68.042	109.802	72.973	85.515	158.488	555.552	484.386	1.039.938
Provinces	**Secondary Education**			**Associate degree**			**Undergraduate**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
BİNGÖL	2.728	1.839	4.567	721	769	1.490	701	553	1.254
ELAZIĞ	5.779	3.977	9.756	1.578	1.938	3.516	1.776	2.043	3.819
MALATYA	7.189	5.294	12.483	1.905	2.638	4.543	2.554	3.200	5.754
TUNCELİ	594	813	1.407	179	381	560	171	258	429
TÜRKİYE	573.745	453.562	102.307	146.027	221.330	367.357	193.196	256.732	449.928
Provinces	**Master's Degree**			**Doctorate**			**TOTAL**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
BİNGÖL	15	17	32	5	1	6	8.459	8.887	17.346
ELAZIĞ	88	91	179	5	5	10	13.667	14.023	27.690
MALATYA	94	104	198	7	5	12	18.264	16.908	35.172
TUNCELİ	3	9	12	0	0	0	1.360	2.273	3.633
Türkiye	8.031	9.921	17.952	447	381	828	1.591.731	1.579.869	3.171.600

Source: (Social Security Board, 2021)

All these social data provide a basis for the policies developed in the field of regional development, as in other policy areas, and for monitoring the impact of the activities carried out. In this context, many analytical studies are also carried out. The Socio-Economic Development Ranking (SEGE), prepared to support the design, implementation, monitoring, and evaluation processes of regional development policies, is one of the leading studies. In 2017, the General Directorate of Development Agencies of the Ministry of Industry and Technology conducted province-based analyses. Based on the natural diffractions in the index values obtained, districts in Türkiye are classified in 6 development levels. Accordingly, Bingöl, one of the TRB1 provinces, ranks 71st in Türkiye and is classified under the 6th developed level. The unemployment rate (7%) and labor force participation rate (54.6%) are above the national average (9.7% and 50.6%, respectively), which, together with Bingöl's competitiveness and financial situation, causes Bingöl to be placed in the 6th development level.

Elazığ and Malatya are ranked 42nd and 44th in the country and are classified under the 4th developed level. In Elazığ, the most developed province in the Eastern Anatolia Region, 14% of the employed people are employed in the manufacturing industry. Malatya, which generally ranks behind in financial and employment variables, ranks 12th in the variables of population ratio of graduates of higher education or faculties and manufacturing industry registered workplace ratio.

In the 5th development level, Tunceli ranks 59th in the country. The province ranks high especially in employment and education variables. In Tunceli, which ranks first with 73% of the working age population, the proportion of the population aged 22 years and over with a higher education or faculty degree (18%) is higher than the country average (15%). While the net enrollment rate in general secondary education is 81.3% for Tunceli, the average for Türkiye is 79.3%. On the other hand, Tunceli, which has the lowest contribution to the total agricultural production value of the country, is among the provinces with low values in manufacturing industry workplaces ratio, investment with incentive certificate and export per capita variables[13].

On the other hand, in the district SEGE study conducted in 2022, the first principal component values were used, and the SEGE-2022 index values of the districts were obtained. With 56 variables, Principal Component Analysis (PCA) yielded index values ranging from 6.959 (Şişli-Istanbul) to 1.447 (Harran-Şanlıurfa). Based on this, as in the 2017 study, districts in Türkiye are classified into 6 development levels.

Table 15: Distribution of Districts by Development Levels (2022)

Development Level Index Value (ED) District Numbers	Development Level Index Value (ED) District Numbers	Development Level Index Value (ED) District Numbers	TRB1 Region Development Level ED District Numbers
1	ED ≥ 1,632	67	0

[13] Ministry of Industry (2017)

2	1,632> ED ≥ 0,396	173	4
3	0,396> ED ≥-0,173	175	1
4	-0,173> ED ≥-0,493	215	11
5	-0,493> ED ≥-0,824	222	16
6	-0,824> ED	123	8
Total		**975**	**40**

Source: (SEGE, 2022)

According to this index, the distribution of districts in the TRB1 Region is as follows:

Table 16: Distribution of TRB1 Districts (2022)

Malatya			**Elazığ**		
District Name	Nationwide Ranking	Level	District Name	Nationwide Ranking	Level
Yeşilyurt	130	2	Merkez	112	2
Battalgazi	162	2	Keban	563	4
Arapgir	551	4	Kovancılar	576	4
Darende	578	4	Karakoçan	621	4
Akçadağ	645	5	Maden	708	5
Doğanşehir	705	5	Ağın	736	5
Hekimhan	721	5	Sivrice	755	5
Yazıhan	779	5	Baskil	788	5
Kale	791	5	Alacakaya	798	5
Kuluncak	875	6	Palu	806	5
Arguvan	876	6	Arıcak	928	6
Doğanyol	903	6			
Pütürge	933	6			
Bingöl			**Tunceli**		

District Name	Nationwide Ranking	Level	District Name	Nationwide Ranking	Level
Merkez	274	3	Merkez	117	2
Yayladere	593	4	Hozat	502	4
Kiğı	649	5	Ovacık	535	4
Genç	753	5	Çemişgezek	573	4
Solhan	799	5	Pertek	604	4
Yedisu	902	6	Pülümür	628	4
Karlıova	915	6	Mazgirt	698	5
Adaklı	932	6	Nazımiye	808	5

Source: (SEGE, 2022)

As seen in Table 16, there are four districts in Tier 2. According to SEGE 2022, manufacturing industry and services sectors are concentrated in these districts. The number of workplaces in these sectors, together with the districts in tier 1, constitutes approximately 75% of Türkiye. Due to the size of the manufacturing industry, Tier 2 districts, which account for 51% of industrial electricity consumption in Türkiye, stand out in this variable. It is noteworthy that these districts also benefit greatly from investment incentives. In fact, 47% of the investment amount with incentive certificates in 2019 and 2020 belongs to districts at this level. This ratio is the highest among the six development levels in the SEGE 2022 study. Similar to the manufacturing industry, about 35% of the workplaces in the services sector are located in 173 districts in Tier 2. On the other hand, when critical education variables representing human capital as one of the most important inputs of socioeconomic development are analyzed, it is observed that the districts in Tier 2 have values above the national average. In these districts, the ratio of female graduates with primary education and above and the ratio of the number of university students to the total population are at high levels. In other educational variables included in the research, there is a heterogeneous structure within Tier 2 depending on the population and educational infrastructure facilities.

Only one of the 40 districts in the region is located in Tier 3, while there are 11 districts grouped in Tier 4. The shares of districts' manufacturing and services sectors in Tier 3 (8% and 9%) are considerably lower than in Tiers 1 and 2 of development (49.7-49.6% and 37-35% respectively). Moreover, the share of university graduates in all districts in Tier 3 ranges between 7% and 25%.

The manufacturing industry and services sectors of the districts in Tier 4 and their workplaces in these sectors vary between 3% and 4% in Türkiye. Likewise, when the shares of establishments in intensive service sectors are analyzed, it is seen that districts at this level have a share of 3%. In terms of education, which is one of the most important issues of socioeconomic development, it is observed that the districts in the 4th level have values above the national average in some variables. For example, Çemişgezek (Tunceli) ranks 8th in the country in the average score of the High School Entrance Examination (LGS). Another educational variable, the proportion of university graduates, shows that the average level of development in Tier 4 (11%) is close to the national average (13%).

The districts in TRB1 are predominantly classified under the 5th level of development. At this level, there is a decrease in the share of the number of workplaces in manufacturing industry and services sectors in Türkiye. In districts at this level, the share of manufacturing industry establishments in Türkiye is 1.7%, well below previous levels. A similar situation is also valid for the services sector. Approximately 1.8% of the share of services sector establishments in Türkiye belongs to districts at this level, which is below the previous levels. The economic structure of the level and the low population share are effective in these low rates. In addition, the districts in tier 5 are ranked last in education variables with level 6.

There are eight districts from TRB1 in Tier 6. Looking at the distribution of workplaces in the manufacturing industry and services sectors in Türkiye, it is observed that the share of workplaces in both sectors is below 1% in this tier. Another striking feature of the districts at this level is that the majority of the population lives in rural areas.

Economic Structure of the Region

According to 2020 Level 2 regional gross domestic product (GDP) (million TL), TRB1 Region ranked 21st among 26 regions. Again, TRB1 ranks 6th in terms of real growth rate of regional gross value added (GVA) at basic prices in 2020 at NUTS-2 level.

Malatya has the highest GDP in the region and Tunceli ranks first in terms of GDP per capita. However, all provinces are below Türkiye's average.

Table 17: TRB1 GDP (2020-2021)

TRB1 Region GDP (TL) (2020)		**TRB1 Region GDP (TL) (2021)**	
Province	**Value**	**Province**	**Value**
Bingöl	9.338.507	Bingöl	12.202.421
Elazığ	24.606.026	Elazığ	33.124.400
Malatya	29.592.008	Malatya	38.831.203
Tunceli	5.064.588	Tunceli	6.099.392
TRB1 Region GDP per capita (Thousand TL) (2020)		**TRB1 Region GDP per capita (Thousand TL) (2021)**	
Province	**Value**	**Province**	**Value**

Bingöl	33.258	Bingöl	42.850
Elazığ	41.738	Elazığ	56.332
Malatya	36.844	Malatya	48.093
Tunceli	60.255	Tunceli	73.008
Türkiye	60.525	Türkiye	86.144

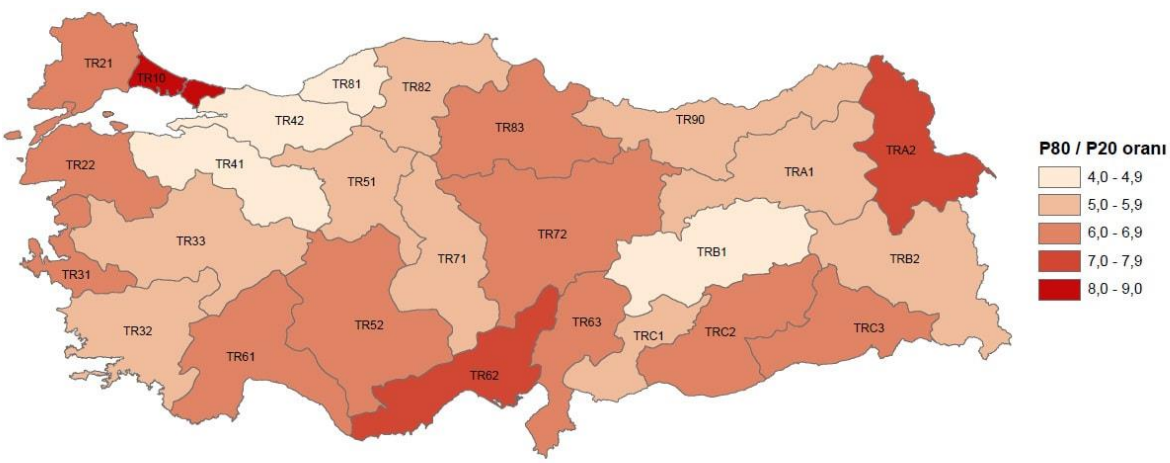
Source: (TURKSTAT, 2022)

The Gini coefficient, which takes a value between 0 and 1, provides the opportunity to make comparisons by defining income inequality in numbers. Approaching 1 indicates an increase in inequality, while approaching 0 indicates a decrease. In 2022, TURKSTAT published the 2021 Regional Results of the Income and Living Conditions Survey prepared with 2020 data[14]. According to the study, TRB1 Region ranked 23rd among NUTS-2 regions in income inequality with a Gini coefficient of 0.31 in 2020. In 2021, it decreased this coefficient to 0.29, ranked 25th and became the 2nd NUTS-2 region with the lowest income inequality.

Similarly, the P80/P20 ratio is another method used for income inequality. It is calculated as the ratio of the income of the 20% group with the highest income to the income of the 20% group with the lowest income. The smaller the ratio, the lower the income inequality. As reflected in the above-mentioned TURKSTAT study, the P80/P20 ratio is 7.6 in Türkiye, while the lowest value is 4.1 in TRB1, the NUTS Level 2 region. According to this ratio, TRB1 has the lowest income inequality across the country.

[14] TURKSTAT, 2021

Figure 3: P80/P20 ratio based on equivalent household disposable income, NUTS Level 2



Source: (TURKSTAT, 2021)

If TRB1 Region is analyzed on a sectoral basis, agriculture and livestock production data stand out in the region, especially in Malatya and Elazığ.

Table 18: Agriculture and Livestock Sector Data

Regional Agriculture and Livestock Sector Data						
Bingöl	**Crop production value (thousand TL)**	**Production number of grains and other plant products (tons)**	**Total cultivated agricultural area (hectare)**	**Number of cattle (head)**	**Number of sheep and goats (head)**	**Live animal value (thousand TL)**
2017	109.887	319.894	26.494	137.512	504.732	1.256.640
2018	133.822	349.560	26.968	132.772	510.781	1.255.457
2019	135.867	375.942	28.387	140.289	635.603	1.550.412
2020	141.505	407.053	26.913	144.550	720.852	1.978.942
2021	218.780	402.036	26.499	132.307	696.131	2.070.123

This project is co-financed by the European Union
and the Republic of Türkiye.

Elazığ	Crop production value (thousand TL)	Production number of grains and other plant products (tons)	Total cultivated agricultural area (hectare)	Number of cattle (head)	Number of sheep and goats (head)	Live animal value (thousand TL)
2017	841.866	610.390	149.361	159.135	603.377	1.416.526
2018	997.385	566.201	158.752	187.418	698.745	1.884.369
2019	1.136.048	612.414	157.182	191.431	722.178	2.106.984
2020	1.614.748	750.557	157.997	209.142	854.456	2.359.823
2021	1.858.943	668.644	161.676	187.326	1.089.120	3.145.472
Malatya	**Crop production value (thousand TL)**	**Production number of grains and other plant products (tons)**	**Total cultivated agricultural area (hectare)**	**Number of cattle (head)**	**Number of sheep and goats (head)**	**Live animal value (thousand TL)**
2017	1.733.142	489.674	186.871	171.963	339.987	1.349.383
2018	1.567.189	593.241	187.356	174.321	338.433	1.536.846
2019	1.950.957	833.601	184.913	180.649	358.018	1.609.534
2020	2.575.754	843.302	185.064	176.729	359.599	1.862.480
2021	3.982.977	702.837	176.490	174.986	367.606	2.302.205
Tunceli	**Crop production value (thousand TL)**	**Production number of grains and other plant products (tons)**	**Total cultivated agricultural area (hectare)**	**Number of cattle (head)**	**Number of sheep and goats (head)**	**Live animal value (thousand TL)**
2017	70.610	114.633	47.970	28.516	336.518	394.218
2018	90.114	107.719	48.632	33.939	368.089	475.224
2019	96.512	109.624	45.815	37.791	404.484	626.474

2020	63.467	112.384	45.732	37.086	432.565	673.713
2021	63.728	82.562	45.473	29.314	491.571	859.242

Source: (TURKSTAT, 2022)

On the other hand, all provinces in the region are net exporters according to 2021 data. In terms of foreign trade, the mining and quarrying sector stands out in Bingöl and Tunceli, while the manufacturing sector stands out in Elazığ and Malatya[15]. According to total foreign trade and enterprise data, the total number of enterprises is increasing in the provinces of the region except Bingöl. Total electricity consumption per capita shows similar trends. This draws attention to the growth of the manufacturing industry in the region over the years.

Table 19: Region Total Foreign Trade and Enterprise Data (2017-2021)

Bingöl	**Total Exports ($1000)**	**Total Imports ($1000)**	**Total number of startups**	**Total electricity consumption per person (kWh)**
2017	1.688	16.351	8.049	1.078
2018	971	988	8.385	1.087
2019	1.127	575	8.463	1.094
2020	2.836	952	8.377	1.078
2021	4.571	811	8.915	1.131
Elazığ	**Total Exports ($1000)**	**Total Imports ($1000)**	**Total number of startups**	**Total electricity consumption per person (kWh)**
2017	321.291	50.804	22.674	2.358
2018	221.191	22.688	23.473	2.765
2019	207.891	24.938	23.969	2.707
2020	146.527	26.250	24.206	2.850
2021	304.885	24.047	25.376	3.306
Malatya	**Total Exports ($1000)**	**Total Imports ($1000)**	**Total number of startups**	**Total electricity consumption per person (kWh)**

15 İŞKUR, 2021

This project is co-financed by the European Union
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2017	235.780	125.892	29.789	2.238
2018	224.177	102.412	30.858	1.990
2019	271.877	84.863	31.719	1.984
2020	288.864	114.404	32.016	2.031
2021	413.733	107.201	33.953	2.231
Tunceli	**Total Exports ($1000)**	**Total Imports ($1000)**	**Total number of startups**	**Total electricity consumption per person (kWh)**
2017	520	2.662	3.273	1.491
2018	646	93	3.333	1.397
2019	229	700	3.419	1.491
2020	224	135	3.530	1.529
2021	333	1.054	3.675	1.596

Source: (TOBB, 2022)

Although the establishment rate of new enterprises in other provinces of the region except Malatya decreases compared to the previous year, the total number of enterprises increases in 2022.

Table 20: Total Number of Enterprises

NUTS-3	Province	TOTAL NUMBER OF ENTERPRISES- 2022 (ANNUAL)							
		ESTABLISHED			LIQUIDATED		CLOSED		
		Commercial Enterprises	Cooperatives	Sole Proprietorships	Commercial Enterprises	Cooperatives	Commercial Enterprises	Cooperatives	Sole Proprietorships
TRB13	BİNGÖL	120	9	54	21	7	16	7	30
TRB12	ELAZIĞ	397	10	99	64	14	73	20	80
TRB11	MALATYA	579	15	174	119	10	106	8	68
TRB14	TUNCELİ	38	1	15	12	3	11	0	28
	Province	**TOTAL NUMBER OF ENTERPRISES- 2021 (ANNUAL)**							

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NUTS-3		ESTABLISHED			LIQUIDATED		CLOSED		
		Commercial enterprises	Cooperatives	Sole Proprietorships	Commercial enterprises	Cooperatives	Commercial enterprises	Cooperatives	Sole Proprietorships
TRB13	BİNGÖL	131	10	57	15	2	16	2	34
TRB12	ELAZIĞ	332	10	166	59	4	59	5	52
TRB11	MALATYA	479	7	151	64	9	50	3	90
TRB14	TUNCELİ	37	2	18	5	0	2	1	20

Source: (TOBB, 2022)

According to the Industrial Capacity Report Statistics of 2021 and 2022 by TOBB, the number of employees in the region is increasing.

Table 21: Capacity Report and Distribution of Number of Employees by Provinces IBBS-3, 2021-2022

	IBBS-3	Province	Capacity Report		Engineer		Technician		Expert		Employee		Administrative		Total**	
			Value	Change % *	Value	Change % *	Value	Change % *	Value	Change % *	Value	Change % *	Value	Change % *	Value	Change % *
2021	TRB11	600	45.178	45178	713,00	43.709	449	33.025	1,84	45,27	24,29	11.079	1,95	14,42	29,243	27.515
	TRB12	285	-0.70	-0.70	443,00	0.23	304	-14.85	1,02	-14.06	5,92	23.62	688,00	25.416	8,372	16.163
	TRB13	101	36.434	36.434	80,00	21.794	75	-3.85	254,00	35156	2,71	36.96	167,00	-2.34	3,285	29.23
	TRB14	30,00	-3.23	-3.23	16,00	-15.79	30	-6.25	27,00	-30.77	447,00	-1.97	39,00	18.18	559	-3.45
2022	TRB11	687	14,50	14,50	771,00	8,13	581,00	29,40	2274	23,65	29.905	23,13	2.198	12,60	35.748	22,24
	TRB12	330	15,79	15,79	495,00	11,74	331,00	8,88	1.140	11,66	7.421	25,44	782,00	13,66	10.169	21,46
	TRB13	109	7,92	7,92	69,00	-13,75	58,00	-22,67	205,00	-19,29	3.038	12,14	112,00	-32,93	3.482	6,00

	TRB14	38,00	26,67	26,67	23,00	43,75	30,00	0,00	33,00	22,22	366,00	-18,12	45,00	15,38	497,00	-11,09
	* Change compared to previous year															
	** Although not visible in the table, other employees (temporary, seasonal, etc.) are also included in the total employees.															

Source: (TOBB, 2022)

When we look at the distribution of registered unemployment data by provinces and occupational groups, it is seen that the highest number of registered unemployed is in jobs that do not require qualifications. The high number of employees in jobs that do not require qualifications has a high impact on the emergence of this situation. On the other hand, the occupational group with the lowest number of registered unemployed is the occupations related to the armed forces.

Table 22: Distribution of Registered Unemployed by Provinces and Professional Groups (2021)

Provinces	Employees Working in Office Services	Service and Sales Personnel	Professions That Do Not Require Qualifications	Qualified Agriculture, Forestry and Aquaculture Workers
BİNGÖL	756	1.585	11.733	154
ELAZIĞ	2.400	3.811	13.079	688
MALATYA	3.553	5.868	12.996	504
TUNCELİ	146	475	2.354	57
TRB1	**6.855**	**11.739**	**40.162**	**1.403**
TÜRKİYE	**292.678**	**550.924**	**1.316.122**	**27.675**
Provinces	**Professionals**	**Craftsmen and Related Workers**	**Professions Related to the Armed Forces**	**Technicians, Technicians and Associate Professionals**
BİNGÖL	760	717	1	553
ELAZIĞ	2.322	2.125	7	1.832
MALATYA	3.269	4.013	12	2.528
TUNCELİ	209	147	3	130
TRB1	**6.560**	**7.002**	**23**	**5.043**

TÜRKİYE	**279.639**	**252.697**	**1.248**	**225.532**
Provinces	**Plant and Machinery Operators and Assemblers**	**Managers**	**TOTAL**	
BİNGÖL	1.048	39	**17.346**	
ELAZIĞ	1.317	109	**27.690**	
MALATYA	2.229	200	**35.172**	
TUNCELİ	97	15	**3.633**	
TRB1	**4.691**	**363**		
TÜRKİYE	**200Ç757**	**24.328**	**3.171.600**	

Source: (SSI, 2021)

Socioeconomic Incentives Affecting the Labor Market in the Region

Socioeconomic incentives in the region affect the labor market on both the supply and demand sides. According to the study published by TOBB in 2021 and 2022, capacity reports were examined on a city basis in terms of the supply market. Since capacity reports show the production power of all public and private sector organizations engaged in production and are designed to determine the industrial production power and to shed light on economic and strategic plans and programs, they give an idea about supply-side incentives. In this regard, when the prominent products and activities in the TRB1 Region are examined in 2021, it is seen **that the construction, mining, food and food services, agriculture and carpentry** sectors are at the top. While **ready-mixed concrete product** ranks first in Bingöl province, **crushed stone** maintains its first place in Elazığ and Tunceli. In Malatya, **apricot (dried)** product is at the top. In 2022, it is seen **that the construction, gravel stone and food and catering services** sectors will be at the top. While **construction blocks and bricks (made of cement, concrete or artificial stone) products are** in the first place in Bingöl province, **gravel products** maintain the first place in Elazığ and Tunceli, as in 2021. In Malatya, **apricot (dried)** product maintained its top position.

Table 23: Top 5 Products Coded by Province (2021-2022)

2021 INDUSTRIAL CAPACITY REPORT STATISTICS			
BİNGÖL			
Order	**Code**	**Explanation**	**Number of Capacity Reports**
1	23.63.10.00.00	Ready-mixed concrete	15

2	08.12.12.30.02	Gravel	13
3	08.12.12.90.00	Travertine, echosin, granite, porphyry (somaki stone), basalt, sandstone and other monumental stones, granules, crushed stone and dust	9
4	56.29.19.00.01	Other food services based on contract (food factories and mass catering kitchens)	9
5	23.99.13.10.00	Bituminous mixtures (based on natural or artificial aggregates and bitumen or natural asphalt as a binder)	5
ELAZIĞ			
Order	**Code**	**Explanation**	**Number of Capacity Reports**
1	08.12.12.30.02	Gravel	27
2	08.11.20.50.04	Limestone (Limestone)- Powder	20
3	23.63.10.00.00	Ready-mixed concrete	20
4	56.29.19.00.01	Other food services based on contract (food factories and mass catering kitchens)	13
5	31.09.13.00.00	Other wooden furniture (excluding bedroom, dining room, living room, kitchen, office, medical, surgical, dental/veterinary furniture and specially designed cases and cabinets for hi-fi, videos, and televisions)	10
MALATYA			
Order	**Code**	**Explanation**	**Number of Capacity Reports**
1	10.39.25.20.01	Apricots- dried	80
2	08.12.12.30.02	Gravel	26
3	23.63.10.00.00	Ready-mixed concrete	25
4	14.14.30.00.01		23

		T-shirt, undershirt, and tank top are articles of clothing made from cotton (knit or crochet)	
5	82.92.10.00.01	Packaging and filling of foodstuffs	23
TUNCELİ			
Order	**Code**	**Explanation**	**Number of Capacity Reports**
1	08.12.12.30.02	Gravel	7
2	23.63.10.00.00	Ready-mixed concrete	6
3	35.11.10.72.00	Hydroelectricity (produced by hydroelectric power plants)	3
4	10.51.40.50.02	Feta cheese	3
5	08.11.20.50.04	Limestone (Limestone)- Powder	3

2022 INDUSTRIAL CAPACITY REPORT STATISTICS			
Top 5 Products Coded by Province			
BİNGÖL			
Order	**Code**	**Explanation**	**Number of Capacity Reports**
1	23.61.11.30.00	Building blocks and bricks, of cement, concrete or artificial stone	28
2	14.14.30.00.01	T-shirt, undershirt, undershirt, etc. clothing; of cotton (knitted or crocheted)	16
3	14.19.22.10.00	Other clothing for men or boys, not elsewhere classified (including vests, tracksuits, jogging suits and sports T-shirts and shorts, but excluding ski clothing and knitted or crocheted clothing)	11
4	14.19.12.10.00	Tracksuits (of knitted or crocheted textiles)	10
5	23.63.10.00.00	Ready-mixed concrete	10
ELAZIĞ			

Order	Code	Explanation	Number of Capacity Reports
1	08.12.12.30.02	Gravel	26
2	23.63.10.00.00	Ready-mixed concrete	22
3	31.09.13.00.00	Other wooden furniture (excluding bedroom, dining room, living room, kitchen, office, medical, surgical, dental/veterinary furniture and specially designed cases and cabinets for hi-fi, videos and televisions)	16
4	08.11.20.50.04	Limestone (Limestone)- Powder	14
5	23.70.12.10.00	Paving slabs, paving stones, large and flat paving stones made of natural stones (except those made of slate)	14

MALATYA			
Order	Code	Explanation	Number of Capacity Reports
1	10.39.25.20.01	Apricots- dried	82
2	10.71.12.00.01	Baklava, kadayıf and other baked goods flavored with sherbet	35
3	10.71.11.00.01	Bread- regular	32
4	14.14.30.00.01	T-shirt, undershirt, undershirt, etc. clothing; of cotton (knitted or crocheted)	31
5	10.39.23.90.05	B.y.s processed or preserved nuts (walnuts, roasted chickpeas, hard-shelled tropical fruits, etc.) and other seeds and their mixtures (except those prepared with vinegar or acetic acid, frozen, purees and pastes, those preserved with sugar)	29
TUNCELI			
Order	Code	Explanation	Number of Capacity Reports
1	08.12.12.30.02	Gravel	6

2	23.63.10.00.00	Ready-mixed concrete	6
3	10.51.40.50.02	Feta cheese	5
4	08.11.11.33.00	Marble and travertine, raw or roughly shaved	4
5	08.11.20.50.04	Limestone (Limestone)- Powder	3

Source: (2022 Industrial Capacity Report Statistics)

According to a study conducted by the Fırat Development Agency, the provinces in the region attract investors economically with the following characteristics[16].

Bingöl
• Extremely favorable structure for animal husbandry • Beekeeping and its important place in honey production • Rich mineral resources • Having geothermal and renewable energy alternatives • Favorability in terms of irrigable agricultural lands • The advantage created by Bingöl Small Industrial Site and 3 other CSOs in the region • Bingöl Organized Industrial Zone
Elazığ
• Having a young and dynamic population • Number of enterprises in the food products and beverages sector • Potential in the manufacture of other non-metallic mineral products and textile products • Organized Industrial Zones specialized in food and textiles • Potential of marble, furniture, forestry, food, and metal goods sectors
Malatya
• Being one of the most industrially developed provinces in the Eastern Anatolia Region • Number of jobs in food, textile and construction sectors and manufacturing potential in these sectors • Specialized Organized Industrial Zones • Turkish and World brands operating in Organized Industrial Zones in the field of textile • Hosting products with high herbal production value • Having registered geographical indications
Tunceli

[16] Euphrates Development Agency. Investment in Bingöl. Accessed from https://fka.gov.tr/bingolde-yatirim on January 8, 2024.

- High education rate of the population
- Agriculture potential

In addition to the financial support provided by the Development Agency in the region, investment incentive certificates can also be given as an example of incentives that have a supply-side impact on the labor market. In this context, it is important to know the content of investment incentive certificates.

Regarding investment incentive certificates, the Investment Incentive Practices presentation published by the Ministry of Industry and Technology in 2022 includes the following statements:

- Regional Incentive Schemes aim to reduce the development gap between provinces and increase their production and export potential.
- Aid intensities are differentiated according to the development levels of provinces.
- The sectors to be supported are determined by taking into account the potential and economic scale of the provinces.
- According to the SEGE 2017 study, provinces are divided into 6 regions.

Statistics of investment incentive certificates issued between 01.01.2001 and 30.06.2023 are as follows:

Table 24: Investment Incentive Certificate Statistics

Region	Number of Documents	Fixed Investment Amount (Million TL)	Employment
Region 1	45.540	1.706.105	1.560.277
Region 2	20.255	776.402	621.595
Region 3	15.538	805.583	442.244
Region 4	10.584	298.076	345.796
Region 5	8.114	217.971	290.721
Region 6	10.954	146.871	607.095
Miscellaneous Region	454	142.025	36.242

Source: (Ministry of Industry and Technology, 2023)

Accordingly, Region 1 received the highest number of investment incentive certificates and ranked the highest in terms of fixed investment amount and employment. When the number of jobs created with investment incentive certificates are analyzed, it is seen that the incentives of the 6th Region surpassed those of the 3rd, 4th and 5th Regions.

When the competitiveness indicator is analyzed, it is seen that Malatya is in Region 4, Elazığ is in Region 5, Tunceli and Bingöl are in Region 6.

In addition, the Decree No. 2018/11201 on Supporting Investments under the Attraction Centers Program entered into force on 25 January 2018. The program aims to increase production, employment, and exports by revitalizing the investment environment in relatively underdeveloped regions and to reduce inter-regional development differences. Manufacturing industry investments, call center and data center investments to be realized in OIZs of the provinces within the scope of the program are supported. Within the scope of the Centers of Attraction, investments made in OIZs can receive 6th Region incentives. In the aftermath of the earthquake, all districts of Malatya and many districts of Elazığ were able to benefit from Region 6 incentives for investments outside of OIZs.

Figure 4: Regional Map SEGE 2017- Regional Incentive Applications

Source: (Ministry of Industry and Technology, 2022)

Looking at the data covering the period between January 2001 and June 2023, the number of employment per incentive certificate in Malatya is 67.7. This ratio is followed by Bingöl, Elazığ and Tunceli with 43.02, 38.1 and 30 respectively.

Table 25: TRB1 Region Industrial Incentive Certificate and Employment Numbers (01.01.2001- 30.06.2023)

Province	Number of Documents	Employment
Bingöl	302	12.993
Elazığ	727	27.729
Malatya	1.203	81.459
Tunceli	70	2.105

Source: (Ministry of Industry and Technology Investment Statistics)

Accordingly, enterprises operating in Bingöl can benefit from the 6th region support features of the Investment Incentive Certificate summarized below:

Table 26: 6th Region Incentive System Applications

Support Elements		Outside OIZ	Inside OSB
Tax Deduction	Investment Contribution Rate	50%	50%
	Corporate/Income Tax Reduction Rate	90%	90%
Employer Share of Insurance Premium	Duration (Year)	10	10
	Ratio to Fixed Investment Amount	35%	35%
Interest Support (one can be preferred)	TL (Points)/Upper Limit (TL)	7/900 thousand	7/900 thousand
	Currency (Points)/Upper Limit (TL)	2/900 thousand	2/900 thousand
Investment Location Allocation		All Investments to Benefit from Regional Supports	
VAT Exemption		Investments with Incentive Certificates in All Sectors Can Benefit	
Customs Duty Exemption		Investments with Incentive Certificates in All Sectors Can Benefit	
Minimum Fixed Investment Amount		500 thousand TL (This amount may be higher for some sectors supported on a regional basis. For minimum investment amount and capacities, please refer to the 6th Region Provincial tables).	

Source:(Ministry of Industry and Technology)

When the sectors of these firms are analyzed, it is seen that by far the highest rate of employment is provided in the manufacturing sector. The services sector is in second place.

Table 27: Bingöl- Sector Related Data (January 2015- April 2023)

Sector Based Data					
Bingöl	Production	Services	Agriculture	Energy	Mining
Number of incentive certificates	102	61	24	18	9
Number of Employment	6.840	1.504	1.229	256	123
Sector Employment Rate (%)	68,73	15,11	12,35	2,57	1,24

Source: (Ministry of Industry and Technology)

The table below shows the 10 sectors with the highest employment commitment in the incentive certificates issued in Bingöl. When the table is analyzed, apparel manufacturing is the sector with the highest employment commitment, accounting for more than 50% of the total employment commitment. Mixed farming activities, which ranks second, stand out as the positive effects of Sütaş's investment in the province.

Table 28: Bingöl- Sectors committing the most employment (January 2015- April 2023)

US97-TRK-04	Employment
Manufacturing of Clothing, Except Fur	5.387
Growing Crop Products Along with Livestock (Mixed Farm)	1.047
General Secondary Education Services	352
Storage and Warehousing Services	350
Primary Education Services	250
Technical and Vocational Secondary Education Services	215
Manufacturing of Non-Fire-Resistant, Clay, Ceramic and Building Material Products	213
Sheep, Goat, Cattle, Horse, Donkey, Bardo, Mule etc. Cultivation; Dairy Farming	163
Iron Ore Mining	148
Slaughterhouse; Processing and Storage of Meat	125

Source: (Ministry of Industry and Technology)

On the other hand, enterprises operating in Malatya and Elazığ can benefit from the 4th Region support features of the Investment Incentive Certificate summarized below. However, with the inclusion of Malatya and Elazığ provinces in the Attraction Center Program in 2017, investments made in OIZs started to benefit from the 6th Region incentives.

Table 29: 4th Region Incentive System Applications

Support Elements		Outside OSB	Inside OSB
Tax Deduction	Investment Contribution Rate	30%	40%
	Corporate/Income Tax Reduction Rate	70%	80%
Employer Share of Insurance Premium	Duration (Year)	6	7
	Ratio to Fixed Investment Amount	25%	35%
Interest Support (one can be preferred)	TL (Points)/Upper Limit (TL)	4/600 thousand	5/700 thousand
	Currency (Points)/Upper Limit (TL)	1/600 thousand	2/700 thousand
Investment Location Allocation		All Investments That Will Benefit from Regional Supports	
VAT Exemption		Investments with Incentive Certificates in All Sectors Can Benefit	
Customs Duty Exemption		Investments with Incentive Certificates in All Sectors Can Benefit	
Minimum Fixed Investment Amount		500 thousand TL (This amount may be higher for some sectors supported on a regional basis. For minimum investment amount and capacities, see the 4th Region Provincial tables.)	

Source: (Ministry of Industry and Technology)

When the incentive certificates of Elazığ province are analyzed, it is seen that the most incentive certificates are received in the energy sector. However, despite this situation, the energy employment rate is at the lowest level. This situation shows that although incentive opportunities in the field of energy are created, labor force cannot be created.

Table 30: Elazığ-Sector Related Data (January 2015- April 2023)

Sector Based Data					
Elazığ	Production	Services	Agricultur e	Energy	Mining
Number of incentive certificates	205	155	71	23	15
Number of Employment	13.010	6.117	504	404	236
Sector Employment Rate (%)	64,18	30,18	2,49	1,99	1,16

Source: (Ministry of Industry and Technology)

Looking at the province of Malatya in general, it is seen that by far the highest rate of employment is provided in the manufacturing sector. Although the number of incentive certificates granted to companies in the energy sector is high, this is not reflected in the employment rates of the sector.

The table below shows the 10 sectors with the highest employment commitments in the incentive certificates issued in Elazığ. When the table is analyzed, apparel manufacturing is the sector with the highest employment commitment, accounting for more than 30% of the total employment commitment. The other prominent sectors are telecommunications, furniture, and textile, respectively.

Table 31: Elazığ- Sectors Providing the Most Employment (January 2015- April 2023)

Sector	Employment
Manufacturing of Clothing, Except Fur	6325
Telecommunication	4170
Furniture manufacturing	1073
Preparation of Textile Fiber and Turning it into Thread; Textile Weaving	1014
Technical and Vocational Secondary Education Services	532
Primary Education Services	476
Manufacturing of Luggage, Handbags and Similar, Saddlery and Harness	435
Manufacturing of Electric Motors, Generators and Transformers	432
Manufacturing of Materials Hardened with Cement and Plaster	401
Finishing of Textile	358

Source: (Ministry of Industry and Technology)

Table 32: Malatya Sector-Related Data (January 2015- April 2023)

Sector Based Data					
Malatya	Production	Services	Agriculture	Energy	Mining
Number of incentive certificates	470	124	88	16	13
Number of Employment	49.302	4.209	821	220	217
Sector Employment Rate (%)	90,02	7,69	1,50	0,40	0,40

Source: (Ministry of Industry and Technology)

The table below shows the 10 sectors with the highest employment commitments in the incentive certificates issued in Malatya. When the table is analyzed, apparel manufacturing is the sector with the highest employment commitment, accounting for approximately 65% of the total employment commitment. The other prominent sectors are textile, primary education, and electronic parts manufacturing, respectively.

Table 33: Malatya- Sectors committing the most employment (January 2015- April 2023)

Sector	Employment
Manufacturing of Clothing, Except Fur	35.852
Preparation of Tactile Fiber and Turning it into Thread; Textile Weaving	2.143
Primary Education Services	1.808
Manufacturing of Electronic Valves, Electron Tubes and Other Electronic Parts	1.621
Implications of Trichotal (Knitted) products	1.541
General Secondary Education Services	1.369
Processing and Storage of Vegetables and Fruits	1.110
Shoe Manufacturing	1.108
Glass and Glass Products Manufacturing	772
Finishing of Textile	762

Source: (Ministry of Industry and Technology)

In the same direction, enterprises operating in the manufacturing sector in Tunceli can benefit from the 5th Region support features of the Investment Incentive Certificate summarized below:

Table 34: 5th Region Incentive System Applications

Support Elements		Outside OIZ	Inside OSB
Tax Deduction	Investment Contribution Rate	40%	50%
	Corporate/Income Tax Reduction Rate	80%	90%
Employer Share of Insurance Premium	Duration (Year)	7	10
	Ratio to Fixed Investment Amount	35%	35%
Interest Support (one can be preferred)	TL (Points)/Upper Limit (TL)	5/700 thousand	7/900 thousand
	Currency (Points)/Upper Limit (TL)	2/700 thousand	2/900 thousand
Investment Location Allocation		All Investments That Will Benefit from Regional Supports	
VAT Exemption		Investments with Incentive Certificates in All Sectors Can Benefit	
Customs Duty Exemption		Investments with Incentive Certificates in All Sectors Can Benefit	
Minimum Fixed Investment Amount		500 thousand TL (This amount may be higher for some sectors supported on a regional basis. For minimum investment amount and capacities, see the 5th Region Provincial tables.)	

Source:(Ministry of Industry and Technology)

On the other hand, when we analyze the industrial incentive certificates granted to firms in Tunceli, the services sector stands out quantitatively. However, the manufacturing sector is by far the leading sector in terms of employment rates.

Table 35: Tunceli-Sector Related Data (January 2015- April 2023)

Sector Based Data					
Tunceli	Production	Services	Agriculture	Energy	Mining
Number of İncentive Certificates	13	22	5	2	0
Number of Employment	1095	381	76	41	0

Sector Employment Rate (%)	68,74	23,92	4,77	2,57	-

Source: (Ministry of Industry and Technology)

The table below shows the 10 sectors with the highest employment commitment in the incentive certificates issued in Tunceli. When the table is analyzed, clothing manufacturing is the sector with the highest employment commitment, accounting for approximately 64% of the total employment commitment. The other prominent sectors are accommodation and social services providing shelter, respectively.

Table 36: Tunceli- Sectors committing the most employment (January 2015- April 2023)

Sector	Employment
Manufacturing of Clothing, Except Fur	1013
Hotels, Motels, Hostels, Camps and Other Accommodations	189
Social Services Provided by Providing Shelter	180
Gas Production and Distribution	40
Fishing, Operation of Fish Production and Breeding Farms and Fishing Related Services	38
Sheep, Goat, Cattle, Horse, Donkey, Mule etc. Cultivation; Dairy Farming	38
BYS Metal Goods Implications	21
Medical and Surgical Equipment and Orthopedic Instruments	20
Production of Spread Products	15
Soft Drink Manufacturing, Mineral and Spring Water Production	10

Source: (Ministry of Industry and Technology)

In addition to all these, 2020 and 2021 were the years when Passive Labor Market Programs such as Short time Working Allowance and Cash Wage Support were used very effectively in TRB1 Region in order to minimize the negative effects of the corona virus pandemic on the labor market.

On the other hand, incentives that affect the labor market in the region on a demand-side basis are mainly offered by SSI and Fırat Development Agency.

When the unemployment insurance activities statistics published by the SSI are analyzed, the highest number of unemployment benefit applications in the region was made in Elazığ. The highest number of people entitled to unemployment allowance was observed in Malatya. Tunceli has the lowest number in all these indicators.

Table 37: Unemployment Insurance Activities by Province (2022)

Provinces	Application for Unemployment Benefits	Number of People Eligible for Unemployment Benefits		
		Unemployment Benefits Cut	Unemployment Benefits Expired	Continuing Payment
BİNGÖL	4.183	425	485	812
ELAZIĞ	11.175	1.272	1.371	2.098
MALATYA	15.990	1.691	1.707	3.247
TUNCELİ	953	81	124	181

Source:(İŞKUR 2022)

When the active labor market programs by provinces in TRB1 Region are examined, it is observed that the number of courses opened, and programs carried out varies in direct proportion to the provincial population. In this framework, vocational training courses and on-the-job training programs are carried out. Vocational training courses are active labor market programs organized to increase the employability of individuals by introducing a new profession or improving existing professional skills. In this context, it is of great importance that the courses to be organized reach the masses who lack skills. The main purpose of the on-the-job training program is to increase the employability of people who do not have professional experience and sufficient work experience by providing them with professional experience and work experience. In addition, it is to provide employers who have difficulty in providing qualified labor force with the opportunity to have detailed information about job seekers by observing and training the people they will hire in the workplace for a certain period of time and to make accurate decisions about hiring[17].

The number of female trainees in vocational training courses is higher than the number of male trainees in all provinces. Considering the fact that women's participation in the labor force increases as their education level increases, vocational training courses facilitate women's entry into the labor market and employability by increasing their skill levels. In Türkiye, 71.7% of the trainees in the January-October period of 2021 were women. Looking at the on-the-job training program, it was observed that this ratio changed in favor of male participants in Elazığ and Malatya, while the gender gap closed in Bingöl and Tunceli. This indicates that women are relatively less interested in jobs that require on-the-job training.

[17] İŞKUR, 2021

Table 38: Active Labor Market Programs by Province, January-October Period 2021

Provinces	Vocational Training Courses				On-the-Job Training Program				Total			
	Number of Courses	Number of Trainees			Number of Programs	The number of participants			Total Number of Programs	Total Number of Participants		
		M	F	T		M	F	T		M	F	T
BİNGÖL	23	282	629	**911**	182	342	392	**734**	205	624	1.021	**1.645**
ELAZIĞ	100	447	1.827	**2.274**	835	1.348	1.259	**2.607**	935	1.795	3.086	**4.881**
MALATYA	184	1.266	2.105	**3.371**	1.019	4.179	2.500	**6.679**	1.203	5.445	4.605	**10.050**
TUNCELİ	2	17	39	**56**	135	131	198	**329**	137	148	237	**385**
TOPLAM	**5.027**	**28.573**	**72.928**	**101.501**	**93.840**	**176.313**	**183.857**	**360.170**	**98.867**	**204.886**	**256.785**	**461.671**

Source: (İŞKUR, 2022)

In terms of services provided to women, Malatya stands out in both vocational training and on-the-job training in proportion to its population. The number of individual interviews is also the highest in this province, followed by Elazığ, Bingöl and Tunceli.

Table 39: Services Provided for Women (2021)

Provinces	Job Placement			Active Labor Market Policies			Individual Meeting
	Public	Special	Total	Vocational Training	On-the-Job Training	Total	Number of Meetings
BİNGÖL	0	1.541	**1.541**	106	334	**440**	4.884
ELAZIĞ	0	2.034	**2.034**	365	610	**975**	10.121
MALATYA	31	5.389	**5.420**	118	1.521	**1.639**	18.172
TUNCELİ	5	425	**430**	4	73	**77**	2.086
TÜRKİYE	**36**	**9.389**	**9.415**	**593**	**2.538**	**3.131**	**35.263**

Source: (İŞKUR, 2022)

This project is co-financed by the European Union and the Republic of Türkiye.

A similar picture is observed in the services provided to young people within the scope of Active Labor Market Policies. In all provinces except Malatya, the number of young women benefiting from these services is higher than the number of young men. In terms of the number of job placements, Malatya ranks first, followed by Elazığ, Bingöl and Tunceli.

Table 40: Services Provided for Young People (2021)

Provinces	**Job Placement (Ages 15-24)**								
	Public			**Special**			**Total**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
BİNGÖL	1	2	**3**	579	777	**1.356**	580	779	**1.359**
ELAZIĞ	22	8	**30**	2.196	710	**2.906**	2.218	718	**2.936**
MALATYA	141	70	**211**	3.407	1.781	**5.188**	3.548	1.851	**5.399**
TUNCELİ	1	1	**2**	218	98	**316**	219	99	**318**
TÜRKİYE	**3.952**	**1.775**	**5.727**	**294.076**	**196.090**	**490.166**	**298.028**	**197.865**	**495.893**
Provinces	**Active Labor Market Policies (Ages 15-24) (2022)**								
	Vocational Training			**On-the-Job Training**			**Total**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
BİNGÖL	167	432	**599**	149	232	**381**	316	664	**980**
ELAZIĞ	185	529	**714**	576	628	**1.204**	761	1.157	**1.918**
MALATYA	733	504	**1.237**	2.058	1.124	**3.182**	2.791	1.628	**4.419**
TUNCELİ	7	11	**18**	36	37	**73**	43	48	**91**
TÜRKİYE	**15.213**	**24.793**	**40.006**	**91.024**	**93.191**	**184.215**	**106.237**	**117.984**	**224.221**

Source: (İŞKUR, 2022)

Prominent Sectors and Professions in the Region

According to the information in the **TOBB Industry Database for the year 2022**, the product with the highest number of capacity reports issued in Malatya is dried apricots, while in other provinces of the region it is gravel.

Table 41: Prominent Sectors and Professions by Cities in TRB1 Region (2022)

BINGOL

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Order	Code	Explanation	Number of Capacity Reports
1	08.12.12.30.02	Gravel	15
2	23.63.10.00.00	Ready-mixed concrete	12
3	08.12.12.90.00	Travertine, echosin, granite, porphyry (somaki stone), basalt, sandstone and other monumental stones, granules, crushed stone and dust	10
4	56.29.19.00.01	Other food services based on contract (food factories and mass catering kitchens)	9
5	82.92.10.00.01	Packaging and filling of foodstuffs	8
ELAZIG			
Order	**Code**	**Explanation**	**Number of Capacity Reports**
1	08.12.12.30.02	Gravel	26
2	23.63.10.00.00	Ready-mixed concrete	22
3	31.09.13.00.00	Other wooden furniture (excluding bedroom, dining room, living room, kitchen, office, medical, surgical, dental/veterinary furniture and specially designed cases and cabinets for hi-fi, videos and televisions)	16
4	08.11.20.50.04	Limestone (Limestone) - Powder	14
5	23.70.12.10.00	Paving slabs, paving stones, large and flat paving stones made of natural stones (except those made of slate)	14
MALATYA			
Order	**Code**	**Explanation**	**Number of Capacity Reports**
1	10.39.25.20.01	Apricots - dried	82
2	10.71.12.00.01	Baklava, kadayıf and other baked goods flavored with sherbet	35
3	10.71.11.00.01	Bread - regular	32
4	14.14.30.00.01	T-shirt, undershirt etc. clothing; of cotton (knitted or crocheted)	31

5	10.39.23.90.05	Bys processed or preserved nuts (walnuts, roasted chickpeas, hard-shelled tropical fruits, etc.) and other seeds and their mixtures (except those prepared with vinegar or acetic acid, frozen, purees and pastes, those preserved with sugar)	29
TUNCELİ			
Order	**Code**	**Explanation**	**Number of Capacity Reports**
1	08.12.12.30.02	Gravel	6
2	23.63.10.00.00	Ready-mixed concrete	6
3	10.51.40.50.02	Feta cheese	5
4	08.11.11.33.00	Marble and travertine, raw or roughly shaved	4
5	08.11.20.50.04	Limestone (Limestone) - Powder	3

Source: (TOBB, 2022)

On the other hand, İŞKUR regularly conducts a Labor Market Survey every year in order to monitor and evaluate the current situation of the labor market and to reveal expectations. Within the scope of the research, data was compiled for enterprises with 20 or more employees in the provinces of TRB1 Region. According to the results of the study, the most prominent sector and other important sectors in the provinces are listed as follows:

Table 42: Labor Market Research Highlighted Sectors (2021-2022)

Province	Labor **Market Research Featured Sector (2021)**	Labor **Market Research Other Important Sectors (2021)**
Bingöl	Building	Manufacturing, Wholesale and retail trade
Elazığ	Manufacturing	Construction, Wholesale and retail
Malatya	Manufacturing	Wholesale and retail, Construction
Tunceli	Wholesale and retail trade	Construction and Manufacturing
Province	Labor **Market Research Featured Sector (2022)**	Labor **Market Research Other Important Sectors (2022)**
Bingöl	Manufacturing	Administrative and support service activities
Elazığ	Manufacturing	Wholesale and retail trade

Malatya	Manufacturing	Wholesale and retail trade
Tunceli	Wholesale and retail trade	Construction and Manufacturing

Source:(İŞKUR, 2022)

İŞKUR defines the concept of open jobs as labor force demands that employers notify to the institution in order to meet the labor force they need.

According to the Labor Market Research, Bingöl Province 2022 Final Report, the occupations with the highest number of open jobs in 2022 (January-September) are woven garment machine operator (1,440 people), physical laborer (1,153 people), customer service officer / assistant (22 people), sales consultant / specialist (13 people). In 2022 (January-September), the occupations with the highest number of job placements are physical worker (1,112 people), woven garment machinist (991 people), dairy/dairy worker (23 people), customer service officer (21 people) and child development and education personnel (14 people). In January-October 2021, 2,930 job placements were made through İŞKUR in the province and the share of women among those whose placement was mediated was approximately 30.9%.

According to the results of the same research, while the rate of open jobs where employers stated that gender was not important was 24.3% in Bingöl, this rate was realized as 57.5% in Türkiye. While the tendency to employ female labor force for existing vacancies was 8.4% in Türkiye; it was realized as 70.1% in Bingöl.

According to the Labor Market Research, Elazığ Province 2021 Final Report, the number of open jobs in 2021 (January-October) is physical worker (general) (6,023 people), women's clothing model assistant 819 people), textile finishing worker (dye) (350 people), marble worker (288 people), garment alteration worker (275 people). In 2021 (January-October), the occupations with the highest number of job placements are physical worker (general) (5,439 people), physical worker (construction) (282 people), marble worker (230 people), cleaning assistant (186 people) and women's clothing model assistant (183 people). In the January-October period of 2021, 8,646 job placements were made through İŞKUR in the province and the share of women in these placements was approximately 15.8%. It was observed that women were mostly placed in the occupations of physical laborer (general) and women's clothing model assistant.

According to the Labor Market Research, Malatya Province 2021 Final Report, the number of open jobs in 2021 (January-October) is body worker (general) (3,700 people), garment worker (3,555 people), marketing officer (1,508 people), call center customer representative (840 people) and spinning operator (612 people). In 2021 (January-October), the occupations with the highest number of job placements are garment worker (3,960 people), physical worker (general) (2,567 people), call center customer representative (892 people), weaving, garment and machinist (653 people), security guard (574 people). In the January-October period of 2021, 12,957 job placements were made through İŞKUR in the province and the share of women in these placements was approximately 32%. It was observed that women were mostly placed in the professions of garment worker and call center customer representative.

According to the Labor Market Research, Tunceli Province 2021 Final Report, the number of open jobs in 2021 (January-October); physical worker (construction) (309 people), physical worker (general) (225 people), plasterer (112 people), cleaning assistant (63 people), garment alterer (50 people). In 2021 (January-October), the occupations with the highest number of job placements are physical worker (construction) (216 people), physical worker (general) (183 people), plasterer (94 people), cleaning worker (55 people) and waiter (35 people). In the January-October period of 2021, 1,119 job placements were made through İŞKUR in the province and the share of women in job placements was approximately 22.3%. When the distribution of open jobs by occupational groups in Tunceli province is analyzed; it is determined that the highest number of open jobs is in the service and sales personnel occupational group and the share of this occupational group in total open jobs is 24.4%. In the second place is the occupational group of craftsmen and related trades.

In 2021, on-the-job training programs and courses with the highest number of beneficiaries were as follows:

Table 43: Labor Market Courses and Programs Opened in 2021 with the Highest Number of Beneficiaries

Province	On-the-job training programs opened in 2021 with the highest number of beneficiaries	Courses opened in January-October 2021 with the highest number of participants
Bingöl	Woven Garment Machinist, Retail Salesperson (Food) and Yoghurt Production Worker	Weaving Garment Machinist and Shepherd/Herd Management Personnel (Sheep Animals)
Elazığ	Retail Salesperson (Food), Garment Worker, Sales Consultant / Specialist	Assistant Women's Clothing Modelist, Textile Finishing Worker (Dye), Garment Alterator
Malatya	Garment Worker, Flat Sewing Machinist, Call Center Customer Representative	Woven Garment Machinist, Home Textile Products Preparation Personnel, Machine Embroiderer
Tunceli	Garden Maintenance Personnel (Maintenance of Parks, Gardens and Groves), Model Machinist (Weaving, Ready-made Clothing and Home Textile), Office Clerk (General)	Clothing Alterator, Call Center Employee

Source: (İŞKUR, 2022)

İŞKUR defines part-time work as a form of flexible work and states that it is particularly demanded by women and young people in the labor market.

The proportion of enterprises with part-time employees in Bingöl was recorded as 24.1%. When analyzed by sectors, this rate is 66.5% in the electricity, gas, steam and air conditioning production and distribution sector, 63.6% in the transportation and storage sector and 50% in the education sector. According to the data in Bingöl, the rate of female employment in enterprises with part-time work is 28.6%, while this rate is 37.6% in enterprises without part-time work. While it is observed that part-time work contributes positively to women's employment across the country, this effect is not evident in Bingöl[18].

The proportion of enterprises working part-time in Elazığ was recorded as 16%. In enterprises operating in the information and communication sector, the proportion of part-time employees is 100%. According to the data in Elazığ, the rate of female employment in part-time enterprises is 33.7%, while this rate is 19.8% in enterprises that do not work part-time. Both in the country as a whole and in Elazığ, it is observed that part-time work has a positive impact on women's employment.

The rate of part-time employees in Malatya is 18.9%. In the accommodation and food service activities sector, the proportion of part-time employees is 40.7%. According to the data in Malatya, the rate of female employment in part-time enterprises is 32.2%, while this rate is 21% in enterprises that do not work part-time. Both in the country as a whole and in Malatya, it is observed that part-time work has a positive impact on women's employment.

While 28.8% of employees in enterprises with 10 or more employees in Türkiye are women, this rate is 25.7% in Tunceli province. According to data from Tunceli province, while the rate of female employment in enterprises with part-time employment is 47%, this rate is 22.9% in enterprises without part-time employment. Both in the country as a whole and in Tunceli, it is observed that part-time work has a positive effect on women's employment.

İŞKUR states that men are employed more intensively in enterprises with shift work, especially in night work. Since women's ability to work night shifts is subject to special regulations in terms of legislation, it is expected that there will be a higher proportion of male labor in enterprises with shift work for reasons such as legal obligations and family responsibilities. However, he also noted that this situation may vary on a sectoral basis. The proportion of women among employees is higher in enterprises without shift work than in enterprises with shift work across the region.

In addition, within the scope of the Labor Market Survey, employers were asked about the occupations with difficulty in recruitment and the following answers were compiled:

Table 44: Professions with Difficulty in Recruiting Personnel (2021-2022)

Province	Professions That Have Difficulty in Recruiting Personnel (2021)

[18] İŞKUR, 2021

Bingöl	Straight Stitcher, Lapping-Assembler (Textile Machinery), Midwife, Truck Driver, Contract Tracker (Textile)
Elazığ	Bakery Worker (Brick, Tile and similar Construction Elements), Weaving Garment Machinist, Nurse, Marble Worker, Wooden Furniture Manufacturing Master
Malatya	Manufacturing, Wholesale and Retail Trade, Education, Accommodation and Food Service Activities, Human Health and Social Service Activities
Tunceli	Patient and Elderly Care Personnel, Babysitter/Childcare Personnel, Cashier, Bucket Operator, Butcher
Province	**Professions That Have Difficulty in Recruiting Personnel (2022)**
Bingöl	Weaving Garment Machinist, Sewing Machine Operator-Fabric, Special Education Teacher, Electrical Technician-High Voltage, Physiotherapist, Manual Worker (Cleaning), Wooden Furniture Manufacturing Master, Manual Worker (Transportation, Loading-Unloading), Other Electrical Engineers, Midwife-Nurse
Elazığ	Woven Garment Machinist, Nurse, Garment Worker, Bakery Worker (Brick, Tile and Similar Construction Worker), Waiter (Service Worker), Other Plastic Products Manufacturing Workers, Manual Worker (Construction), Other Waiters, Bartenders and Related Workers, Wooden Furniture Manufacturing Master, Midwife-Nurse
Malatya	Machinist (Sewing), Call Center Customer Representative, Straight Sewing Machinist, Garment Worker, Woven Garment Machinist, Yarn Spinning Operator (Ring/Vater/Vargel), Chicken Slaughtering and Processing Personnel, Manual Worker (General), Bobbin-Folding-Twisting Machinery Operator, Model Machinist (Ready-to-Wear)
Tunceli	Computer Aided Accounting Officer, Cook, Waiter (Service Personnel), Bread Master, Courier, Vehicle Inspection Station Technician, Driver-Freight Handling, Accounting Professional Personnel, Truck-Tractor Driver, Fuel Sales Personnel (Pumpman)

Source: (İŞKUR, 2022)

In Bingöl, when the employment change expectation by sectors in 2021 is analyzed, the proportion of enterprises expecting an increase in employment is the highest in the professional, scientific and technical activities sector. The sector with the highest rate of enterprises expecting a decrease in employment is the education sector. The highest net employment increase is expected in the manufacturing sector with an increase of 286 people. The highest net employment change rate is expected in the administrative and support service activities sector with 13.3%. In Bingöl, the occupational group with the highest expected employment increase in the next year is plant and machinery operators and assemblers with an increase of

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292 persons. Until April 30, 2022, the occupational group with the highest expected decrease in employment is the professional occupational group[19]. In Bingöl province, the first four occupational groups expected to have the highest net employment increase in 2022 are weaving, garment and machinist, male and female tailors, clothing manufacturers and milk and dairy products operator occupations, respectively. Physical laborer (general) occupation is the occupation with the highest expected net decrease in employment[20].

Table 45: Professions Expected to Increase and Decrease in Net Employment the Most, Bingöl (2021-2022)

BİNGÖL- 2021, Professions Expected to Increase and Decrease in Net Employment the Most		**BİNGÖL- 2022, Professions Expected to Have the Highest Net Employment Increase and Decrease**	
Occupations Expecting Net Employment Increase	**Occupations Expected to Have a Net Employment Decrease**	**Occupations Expecting Net Employment Increase**	**Occupations Expected to Have a Net Employment Decrease**
Woven Garment Machinist	German teacher	Woven Garment Machinist	Manual Worker (General)
Straight Stitcher	Manual Worker (Construction)	Other Men's Tailors Women's Tailors and Clothing Sewers	Shoemaker (Textile)
Call Center Customer Representative	Occupational Safety and Health Field Staff	Milk and Dairy Products Processor	Wooden Furniture Manufacturer
Pattern Control Worker (Textile)		Manual Worker (Construction)	
Craftsmen Working in Rough Construction and Related Works Not Classified Elsewhere		Market Clerk	
Band Chief (Textile)		Iron Carpenter	
Construction Moulder (Wood)		Mason	
Food Laboratory Staff		Truck driver	
Rebar Fastening Master		Other Nurses	

[19] İŞKUR, 2021

[20] İŞKUR, 2022

HRD OS HUMAN RESOURCES DEVELOPMENT OPERATING STRUCTURE

FIRAT KALKINMA AJANSI DEVELOPMENT AGENCY

REPUBLIC OF TURKEY THE MINISTRY OF LABOUR AND SOCIAL SECURITY

Bus Captain (Driver)		Gypsum Plaster Applicator	

Source:(İŞKUR, 2022)

In 2021, when the employment change expectation by sectors in Elazığ is analyzed, the rate of enterprises expecting an increase in employment is the highest in the information and communication sector. The sector with the highest rate of enterprises expecting a decrease in employment is the education sector. The highest net employment increase is expected in the manufacturing sector with an increase of 474 people. The highest net employment change rate is expected in the manufacturing sector with 6.9%. In Elazığ, the occupational group with the highest expected employment increase in the next year is plant and machinery operators and assemblers with an increase of 445 persons. Until April 30, 2022, the occupational group with the highest expected decrease in employment is the occupational group of employees working in clerical services[21]. In 2022, the first three occupations expected to have the highest net employment increase for the next period in Elazığ are physical worker (construction), construction worker and retail salesperson (food). On the other hand, the occupation of wooden mold maker is the occupation with the highest expected net decrease in employment[22].

Table 46: Professions Expected to Increase and Decrease in Net Employment the Most, Elazığ

ELAZIĞ- 2021, Professions Expected to Increase and Decrease in Net Employment the Most		**ELAZIĞ- 2022, Professions Expected to Increase and Decrease in Net Employment the Most**	
Occupations Expecting Net Employment Increase	**Occupations Expected to Have a Net Employment Decrease**	**Occupations Expecting Net Employment Increase**	**Occupations Expected to Have a Net Employment Decrease**
Woven Garment Machinist	Other Accountants	Manual Worker (Construction)	Wood Moulder
Textile Finishing Worker (Dyeing)	Kiln Worker (Bricks, Tiles and similar Construction Elements)	Construction worker	Warehouse Shipment Manager
		Retail Salesperson (Food)	Auto Maintenance Repairer (Auto Mechanic)
Knitting Machine Operator	Manual Worker (Carrying, Loading-Unloading)	Chef	

[21] İŞKUR, 2021

[22] İŞKUR, 2022

Retail Salesperson (Food)	Secretary	Miner (General)	
Garment Worker	Office Clerk (Personnel)	Knitting Machine Operator	
Truck driver	Shuttle Driver (School)	Woven Garment Machinist	
Security Guard (Armed)	Pickup Truck Driver	Waiter (Service Personnel)	
Wood Moulder	Driving Instructor	Underground Production Worker	
Plastic Pipe Manufacturing Worker	Mathematics Teacher-Secondary Education	Furniture Assembler	

Source: (İŞKUR, 2022)

The occupations with the highest number of open jobs in Malatya in 2021 are call center customer representative, garment worker and yarn spinning operator. The occupation with the highest number of open jobs where employers prefer female labor force is other cutters, counters, sewers, and related workers. When the employment change expectation by sectors is analyzed, the rate of enterprises expecting an increase in employment is the highest in the real estate activities sector. The sector with the highest rate of enterprises expecting a decrease in employment is water supply, sewerage, waste management and improvement activities sector.

In the province of Malatya, the first three occupations expected to have the highest net employment increase in 2022 are garment worker, call center customer representative, machinist (sewing). Civil engineer is the occupation with the highest expected net decrease in employment[23].

Table 47: Occupations Expected to Increase and Decrease in Net Employment the Most, Malatya

MALATYA- 2021, Professions Expected to Increase and Decrease in Net Employment the Most		**MALATYA- 2022, Professions Expected to Increase and Decrease in Net Employment the Most**	
Occupations Expecting Net Employment Increase	**Occupations Expected to Have a Net Employment Decrease**	**Occupations Expecting Net Employment Increase**	**Occupations Expected to Have a Net Employment Decrease**
Woven Garment Machinist	Geographic Information Systems Data Entry Operator	Garment Worker	Construction engineer

[23] İŞKUR, 2022

Garment Worker	Other Waiters, Bartenders, and Related Workers	Call Center Customer Representative	Manual Worker (General)
Call Center Customer Representative	Reinforced Concrete Blacksmith	Machinist (Sewing)	Private Security Guard (Unarmed)
Machinist (Sewing)	Wood Moulder	Spinning Operator (Ring/Vater/Vargel)	Cleaning staff
Spinning Operator (Ring/Vater/Vargel)	Other Bricklayers, Stonemasons	Straight Stitcher	Concrete Paving and Curb Stone Paving Worker
Straight Stitcher	Sales Consultant / Specialist	Woven Garment Machinist	Distributor (Mail Delivery Services)
Construction worker	Other Classroom Teachers	Retail Salesperson (Food)	Construction Technology Technician
Retail Salesperson (Food)	Other Engineers	Apricot Processing and Packaging Worker	Wooden Furniture Manufacturing Supervising Foreman
Department Officer	Marketing manager	Presser	Other Teachers
Overlock Machine Operator (Overlocker)		Quality Controller	Office Clerk (Administrative Affairs)

Source: (İŞKUR, 2022)

In 2021, the first three occupations expected to have the highest net employment increase in Tunceli are construction worker, physical laborer (construction) and patient and elderly care worker, respectively. Fuel salesperson (pump attendant) occupation is the occupation with the highest expected net decrease in employment. In 2022, the first three occupations expected to have the highest net employment increase are plasterer, construction element molder (manual) and department clerk. Construction worker is the occupation with the highest expected net decrease in employment[24].

Table 48: Professions Expected to Increase and Decrease in Net Employment the Most, Tunceli

TUNCELİ- 2021, Professions Expected to Increase and Decrease in Net Employment the Most	TUNCELİ- 2022, Professions Expected to Increase and Decrease in Net Employment the Most

[24] İŞKUR, 2022

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Occupations Expecting Net Employment Increase	**Occupations Expected to Have a Net Employment Decrease**	**Occupations Expecting Net Employment Increase**	**Occupations Expected to Have a Net Employment Decrease**
Construction worker	Fuel Salesperson (Pump Man)	Plasterer	Construction worker
Manual Worker (Construction)		Construction Element Moulder (Manual)	Steel Door Assembly Worker
Patient and Elderly Care Personnel		Department Officer	Parquet Layer
Assistant Women's Clothing Modelist		Cold Blacksmith	Plaster Decorator (Papier-mâché)
Electrical Technician		Waiter (Service Personnel)	Associate Accountant
Construction Moulder (Wood)		Other Construction Painters	Butcher
Waiter (Service Personnel)		Furniture maker	Delicatessen Products Salesperson
Cold Blacksmith		Mason	
Manual Worker (General)		Tile, Ceramic and Tile Layer	
Construction Element Moulder (Manual)		Office Clerk (General)	

Source: (İŞKUR, 2022)

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FIRAT KALKINMA AJANSI DEVELOPMENT AGENCY
REPUBLIC OF TURKEY THE MINISTRY OF LABOUR AND SOCIAL SECURITY

Chapter 2- Sectoral Analysis Studies

Although TRB1 Region exhibits a heterogeneous structure in terms of development, it also harbors sectoral focus differences among the provinces of the region. For this reason, the region should be considered as in the process of transition from primary production activities (agriculture) to secondary production activities (manufacturing). From this point of view, although there is a need for labor force in the agricultural sector or in sectors that do not require added value, considering national and international trends and high-scale policies, shifting employment and trained human capital in these sectors to manufacturing and service sectors will significantly increase the competitiveness of the region and the added value that the region will create. For these reasons, manufacturing and service sectors were identified as the main sectors to focus on during the field research. However, since the manufacturing sector currently dominates regional development in TRB1, textile manufacturing, manufacturing of other non-metallic mineral products and manufacturing of food products have been prioritized. The trends in these sectors are briefly as follows:

Textile Manufacturing Sector

Textile is a sector that plays an important role in the European manufacturing industry. In TRB1 Region, the textile manufacturing sector makes a great contribution to the economy. The textile sector, which creates a high added value in the region with the effective use of local resources, stands out as one of the leading sectors when evaluated in terms of the growth potential of the region. However, the European Commission is also engaged in dialogues with non-EU countries on policy and regulatory issues affecting the textile and clothing industry[25].

According to the Eleventh Development Plan, the main objective is for Türkiye to become one of the leading countries in the textile, leather and ready-to-wear sector, leading the value chain with a focus on fashion design and branding. It is aimed to develop fast and flexible production, innovation, customer orientation, integrated production structure, social responsibility and environmental awareness, merchandising and organization skills in this sector.

On the other hand, with regard to technical textiles, which is one of the important areas in the transformation to a high value-added structure in the sector, it will be important for companies to cooperate with other stakeholders in the value chain (especially machinery, fiber and technical end-use manufacturers) with their activities for optimum technology selection, compliance with legislation on environmental protection, energy efficiency and waste reuse, and this issue will be supported within the scope of the Eleventh Development Plan.

[25] European Commission. (12 Aralık 2021). Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries. https://single-market-economy.ec.europa.eu/sectors/fashion/textiles-and-clothing-industries_en

Moreover, a Textile-Leather-Ready-to-Wear Working Group was established within the framework of the preparations for the Twelfth Development Plan. This indicates that the sector will be prioritized and supported in the 2024-2028 period as well.

Manufacture of Non-Metallic Mineral Products Sector

The European Commission is committed to the non-metallic mineral products sector as part of its single market economy strategy. Within this sector, the Commission sees value in the production of products ranging from construction products such as output, cement, bricks and tiles, sanitary ware and glass to consumer products such as tableware and decorative items. It also considers it important that companies range from global players (in the cement, flat glass and brick industries) to small and medium-sized companies (in the ceramic industry and parts of the lime industry)[26].

According to the Eleventh Development Plan, the main objective in the non-metallic mineral products sector is to reduce input costs and supply risks, particularly energy, and to improve sustainable production, productivity, and competitiveness. Within the framework of the needs of this sector; development of transportation infrastructure in the required regions and prioritization of the use of domestic and innovative products through public regulations will be ensured, R&D and investments in refractory materials and advanced ceramic products, which are met by imports, will be supported, and awareness of P&D and innovation will be raised.

Food Products Manufacturing Sector

The European Union attaches great importance to the food manufacturing sector. The rise in global commodity prices, further accelerated by Russia's invasion of Ukraine, once again emphasizes the need for EU agriculture and food supply chains to be more resilient and sustainable, in line with the farm to fork strategy.

In this context, the European Commission presents a series of short and medium-term action plans to improve global food security and support farmers and consumers in the EU in light of rising food prices and input costs such as energy and fertilizers[27]. In the framework of the action plans, the Commission declares that it is committed to taking all necessary measures to ensure that the EU, as a net food exporter and the largest agri-food producer, contributes to global food security, in particular in Ukraine, North Africa and the Middle East.

At the national scale, as emphasized in the Eleventh Development Plan, climate change is expanding its impact at the global level. However, it is obvious that the level of commitment and adaptation of developed

[26] European Commission, 2022

[27] European Commission, 2022

and developing countries under the Paris Agreement, which provides a new framework, is insufficient to realize global targets. As mentioned in the Plan, while increasing food demand, climate change, urbanization, soil and water resources, and urbanization put pressure on agricultural products and producers, the development of plant and animal species suitable for the changing climate, the protection of the environment and biodiversity gain importance, and the need for qualified labor and technology increases in order to meet food demand with fewer resources. Emerging market economies are also striving to be competitive in the food chain through large-scale production as well as supporting small-scale agricultural enterprises based on technology. Demand for healthy, organic and of high-quality agricultural products is on the rise, and the tendency to deliver additive-free and local products directly to consumers through different marketing channels is strengthening.

On the other hand, the sector aims to make necessary arrangements in logistics and warehousing to reduce the pressure of food prices on inflation and to put in place the institutional infrastructure for regional and product-based planning in agriculture. In this context, the national plan aims to strengthen the organized structure in agricultural production in order to reduce intermediation and logistics costs in the food distribution chain, and it is essential to make arrangements to provide food logistics and storage services at international standards and to create a more competitive structure.

Within the scope of the preparation of the Twelfth Development Plan, a Special Expertise Commission on Food Safety and Reliability was established. The Commission will carry out its activities in line with the objective of ensuring food safety and reliability by increasing the production of agricultural and food products.

When national and international trends and upper-scale policies are analysed, it is understood that the following sectors are also important for the region in addition to the three prominent sectors:

Software Development/Coding

The Software Development / Coding sector is one of the most popular and demanded sectors both globally and nationally. It also offers a career path for all groups thanks to the opportunity to work remotely. The sector is also supported by the European Union, both by highlighting good example groups and by financing projects in various fields, especially digital transformation projects. Considering the relatively high wages and the added value it creates, it has been concluded that the sector promises a future in the region, although there is a foreign language barrier.

Graphic design is one of the sectors needed in many areas from the manufacturing sector to the software sector. The graphic design profession, which will lead the development and growth on a regional scale, provides the opportunity to work independently from home and workplace. It offers the possibility of working in large workplaces anywhere in the world and freelancing at the same time in the presence of computers, software that the person needs to use as required by the work he / she is dealing with and internet connection. For this reason, it has been understood that the graphic design sector should come to the forefront in order to ensure the continuity of the qualified labour force in the region and to add added value to the region.

Machinery and Equipment Manufacturing

The region in question has industrial growth potential. Machinery manufacturing, which has the potential to develop with the contribution of the technical schools and engineering departments of the universities in the region, will contribute to the overall industrial growth of the region. At the same time, the development of the machinery manufacturing sector will encourage the adoption and application of more advanced technologies in the region. This process could facilitate technology transfer and skills development, which could have a positive impact on the overall technical capabilities of the labour force. The sector is vital for the continued growth and increased competitiveness of industries in both the European Union and Turkey. Machinery and manufacturing play a fundamental role in producing a wide range of products, from automobiles to consumer electronics. As technology evolves, the demands of the sector are changing and require a highly skilled workforce with the ability to work, maintain and innovate in manufacturing processes. Therefore, training in this sector plays a key role in ensuring that businesses remain efficient, sustainable and globally competitive.

Business Management (Export, accounting and finance etc.)

Private sector companies operating in the region need qualified personnel in sales, marketing, finance, human resources, marketing, management, accounting, advertising, R&D, etc.

Foreign trade is an area that helps emerging markets access the cash they need to grow, expand and become profitable. Foreign trade activities are important for the provinces of the region in terms of accessing international markets, expanding their economic activities beyond their domestic borders and earning foreign currency through exports. However, it should be recognised that the importance and focus of foreign trade may vary among these provinces depending on their specific economic activities, industries and development priorities. In this respect, textile and agricultural products in Malatya, agricultural and industrial products in Elazığ, agricultural products in Bingöl and agricultural and handicraft products in Tunceli are important in terms of foreign trade.

As a result of the studies conducted, accounting and finance has been one of the prominent fields especially in Elazığ and Malatya. The need for staff in the field of pre-accounting and computerised accounting was expressed by the representatives of the relevant institutions. Accounting and finance management is a promising field for the future. As businesses and organisations increasingly move to digital systems for financial management and reporting, the demand for skilled professionals in computerised accounting is increasing.

Service Sector for Tourism

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Tourism has been one of the prominent areas in the focus group meetings, especially in Tunceli. The tourism industry in the region has a great potential. As the demand for adventure and nature-based tourism experiences increases, qualified human resources in the tourism service sector will play an important role in attracting tourists, revitalising local economies and contributing to tourism. In particular, the projected growth in this area offers a unique opportunity for social inclusion and empowerment of vulnerable populations, including young people, women and persons with disabilities.

Chapter 3- Field Study Methodology

During the desk study, the quantitative data available in the field was analyzed. A field study was conducted in the second half of the activity. Qualitative research methods were used during the fieldwork. In the light of the literature, the team reached consensus with the beneficiaries to conduct in-depth interviews and focus group discussions with the target groups.

Qualitative research methods provide the researcher with a comprehensive insight into the lived world from the perspective of the subjects. According to Uwe Flick, qualitative research is designed to approach the world 'out there' (not in specialized settings such as laboratories) and to understand, describe and sometimes explain social phenomena in a number of different ways from the 'inside'[28]. In addition, in-depth interviews conducted in the context of qualitative research have been found to be appropriate to people's work in understanding the world they live in, in understanding themselves and their experiences, and in explaining and elaborating on their experiences of the world. Focus group discussions, on the other hand, enable the collection of detailed information as well as beliefs, attitudes, and expectations on a particular issue from the perspective of participants with a similar background and/or experience. Furthermore, qualitative research methods do not directly aim to represent the entire research population, but instead seek to represent the diversity of different experiences.

During desk studies conducted with secondary data, the following results were found:

- According to TURKSTAT 2021 data, 45% of the population in the region resides in Malatya and 30% in Elazığ. These are followed by Bingöl and Tunceli with 17% and 8% respectively.

- According to 2021 TURKSTAT figures, while the approximate population in TRB1 Region is 2,490,127 people, the labor force participation rate is 46.6%. The highest number of unemployed people is in Malatya, which is also the most populous province in the region. Malatya is followed by Elazığ, Bingöl and Tunceli respectively. However, when we compare the registered unemployment population on a provincial basis to the total population, it is seen that this ratio is highest in Bingöl. When the main target groups in the study are analyzed, the following results are observed: The ratio of registered unemployed and registered young unemployed to the population is highest in Bingöl. In the female population, the province with the highest ratio is Tunceli.

Focus groups are one of the fundamental methodologies used in conducting qualitative research. Focus group discussions are frequently used as a qualitative approach to deeply understand social issues. The method aims to collect data from a deliberately selected group of individuals rather than a statistically representative sample of a broader population. Focus group discussions are organized by inviting the target group; they are designed to understand the social attitudes in the area, and by learning the employment

[28] Kvale, 2007: 46

preferences and expectations of the target group, to achieve a realistic representation of the current capacity and potential of the target groups and relevant actors in the labor market.

Focus group discussions are conducted by an expert, usually called as facilitator, and involve a discussion among a group of six to eight participants or respondents. The length of focus groups is usually between 90-120 minutes. This methodology was followed in this study.

Focus group participants can be selected in two ways: random selection to ensure that all segments of society are represented, or non-random selection to help reveal a particular position or perspective. Within the scope of the study, non-random selection was made in order to reach the targeted outputs. Meetings were organized to address the problems and expectations of women and young people, including other vulnerable groups.

Some of the focus group meetings organized within the scope of the study were requested to focus entirely on the population between the ages of 15-29. In order to ensure the participation of all vulnerable groups, some of the meetings were organized online.

During the meetings, the questions selected from the following set of questions were guided and the questions were reshaped on a city-specific basis:

1. Which sectors stand out in your city?

Mainly agriculture and food for Bingöl, industry and textile for Elazığ, agriculture, textile and food for Malatya and agriculture, food, and handicrafts for Tunceli.

2. Which people/groups come to your mind when you think of disadvantaged people?

In all provinces, the response of women and university / college graduates came to the fore.

3. Who do you think are the most disadvantaged people/groups in labor force participation in your city?

In all provinces, the answers of women and young people with university/college degrees stand out.

4. What are the reasons for this disadvantage (lack of investment, gender bias, insecurity/hopelessness, public policies, etc.)?

When this question was directed to job seekers and workers, the answers were low wages, lack of qualified jobs, lack of social opportunities and working conditions outside the legal regulations.
When employers were asked this question, they responded that they could not find qualified employees suitable for the existing jobs in the region, and that the employees they found left the job in a short time. They also stated that they lose a large number of young people every year in certain periods because they cannot compete with the wages earned from seasonal agricultural labor, especially in Malatya.

5. What does “working” / “going to work” / “having a job” mean to you?

For women in the region, the answer to this question points to a concept where they can gain economic freedom by balancing their domestic labor. For young people, the concept of "having a job" represents the key to a future in which they can both gain economic freedom and build their careers, as well as improve their social lives and live like their peers in more developed regions.

6. What would you like to say about your job search/work experiences in your city/region? What would you like to convey positively/negatively?

Respondents indicated that they encountered unskilled jobs across the region, regardless of the sector in which the job was sought.

7. Research shows that the participation of youth/women and people with disabilities in the labor force is limited in your region. What do you think are the reasons for this?

Similar to the question on disadvantage, the responses to this question were low wages, lack of qualified jobs, lack of social opportunities and working conditions outside the legal regulations in the region.

8. In your opinion, what are the needs and what needs to be done for the participation of youth/women/disabled people in the labor force in your region/city? Who/which institutions can do these?

In Malatya and Elazığ, the recommendation to increase orientation and trainings for remote working rather than workplaces in the region came to the fore. In Tunceli and Bingöl, on the other hand, the importance of part-time work and nursery opportunities and increasing the financial incentives for training participants were emphasized.
Employers also emphasized the need to increase government incentives.

9. Do existing opportunities such as on-the-job training and internships meet your expectations?

It was emphasized that trainings are always provided by the same institutions in a way that is not very suitable for the conditions of the time. In addition, it was underlined that educators from outside, without knowing the conditions of the region, provide education from a patronizing point of view and that this is a waste of resources. It was also stated that foreign languages are not emphasized both in the school and in the trainings in the region and that this is a major deficiency for young people in the region.

10. Are there any situations where you prefer being unemployed to finding a job? If yes, what are these?

It has been observed that young university students and graduates in the region would not do the jobs they were trained for in return for minimum wages, and that they would rather be unemployed than employed.

11. Are you aware of the financial and fiscal supports/incentives received by the institutions in the region? If yes, have you shifted your career in line with these incentives? If no, does learning about these incentives affect your career plan?

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It has been observed that only the trainings provided by İŞKUR, and Public Education Centers are known throughout the region. In addition, due to the complexity of the processes of institutions such as KOSGEB, it is understood that people have stopped being interested in the incentives of these institutions.

12. In which fields/sectors would you prefer to have job opportunities in your region/city and what conditions would you prefer to be provided in order to increase labor force participation?

In addition to their departments, university students stated that they would like to work in location-independent sectors such as software development/coding, graphic design, and foreign trade. However, they emphasized that they lack the necessary infrastructure and knowledge, especially foreign language skills, for these sectors.

13. Do you travel to other cities in the region for work?

While university students in the region answered yes to this question, especially the married female population answered no.

On the other hand, **in-depth interviews** were conducted in the region. In-depth interviews allow participants to share their views without bias from other participants. In addition, one-on-one interviews avoid “groupthink” bias (where the participant's thinking is influenced by what they hear from other participants) and provide higher quality information collected from participants. Since the purpose of the interviews to be conducted within the scope of the study was to analyze the supply side of the labor market in the region, these interviews were conducted with public and private sector representatives. In order to reach all groups, interviews were conducted both online and in the field.

During the interviews, selected questions from the following set of questions were posed and the questions were reshaped according to the city:

1. Which sectors stand out in your city and why?

Mainly agriculture and food for Bingöl, industry, textile, and foreign trade for Elazığ, agriculture, food, textile and related foreign trade for Malatya, and agriculture, food, underwater diving, and handicrafts for Tunceli.

2. Which individuals/groups come to mind when you think of disadvantaged people?

In all provinces, the emphasis was on university or college graduates as well as women. In addition, in the interviews conducted in Tunceli, physically and mentally disabled individuals were also explicitly included in this demographic group.

3. Who do you think are the most disadvantaged people/groups in labor force participation in your city?

In all provinces, the answers of women and young people with university/college degrees were prominent. In addition, individuals with physical and mental disabilities were frequently included in this group in the interviews conducted in Tunceli.

4. What are the reasons for this disadvantage (lack of investment, gender bias, insecurity/hopelessness, public policies, etc.)?

When this question was posed to job seekers, workers, and representatives of civil society organizations in the region, the responses included low wage attitudes, lack of qualified jobs, limited social opportunities and working conditions outside the legal regulations. Representatives of public institutions in the region stated that potential workers do not devote the necessary time and effort to the process.

5. What do you think can be done to enable women, youth and other disadvantaged groups living in your city/region to participate in the labor force?

In all provinces, the recommendation to increase orientation and trainings for teleworking came to the fore. In addition, in Tunceli, the importance of increasing the number of financial incentives to be given to training participants with part-time work and nursery opportunities was emphasized.

6. Are there any public supports (various financial and fiscal supports) that you receive? If yes, to what extent do these supports help you?

It was said that there are supports, but it is difficult to create appropriate conditions to receive some supports. Difficulties in finding disabled employees in Malatya were given as an example.

7. Can you find trained employees in your sector?

Institutions state that they have difficulty in finding qualified personnel.

8. Are vocational high schools in your city/region useful for you?

Especially in Tunceli and Elazığ, it was emphasized that vocational high schools and the staff they train are useful.

9. Are vocational high schools in your city/region useful to you?

While the importance of vocational colleges is emphasized throughout the region, it is stated that the most qualified students continue their education life with the Vertical Transfer Examination (DGS) and therefore the required efficiency cannot be obtained.

10. Do you have mutual benefits with the universities in your city/region?

It was said that university students in the region leave their cities after graduation and go to metropolitan areas.

11. Do you think there is university-industry cooperation in your city/region? What can be done to create/increase this cooperation?

It was emphasized that university-industry cooperation exists especially at the level of vocational schools, and that various curriculum and policy changes such as "three semesters of courses + one semester of paid internship" should be made to increase it.

12. Could you briefly summarize the worker turnover in your organization? If this rate is high, what do you think is the reason for this?

It was emphasized that worker turnover is very intense between companies operating in similar fields. Due to wage differences, especially unqualified workers are said to change jobs rapidly. It was also emphasized that there are worker losses due to seasonal labor in agriculture. It was said that the younger generation often quit their jobs because they could not adapt to the working conditions.

Chapter 4- Conclusions

As a result of the interviews conducted in the field research studies, the following strengths have been reached regarding the labour market in the provinces of Malatya, Elazığ, Bingöl and Tunceli, which constitute the TRB1 Region:

- It has been observed that the young population in the region, especially university graduates and graduates, are aware of the problems that they may encounter in their careers and have a high level of knowledge about the solution of problems.
- It has been concluded that the ability of the people of the region to express themselves is quite high.
- It has been observed that the universities/MYOs and lecturers in the region are willing to change and develop.
- It is understood that the potential in the manufacturing industry of the region is supported by investment incentives.
- It has been learnt that labour incentives continue in the region.
- It has been observed that the entrepreneurship enthusiasm in the region is high.

As a result of the interviews, the following aspects that need to be improved about the region in question were reached:

- It has been observed that people in the region lack motivation towards employment projects and project activities carried out by different institutions.
- It has been noticed that employers have problems in communicating with the young population in the region. There are differences in expectations between employers and the young population looking for a job and they are not able to convey these differences to each other through the right channels.
- Employers stated that they cannot follow the information on sectoral incentives and project opportunities in the region.
- The people of the region think that these examples are a waste of time for them unless they encounter good examples from their own region with similar backgrounds, rather than good examples that have reached a certain point with completely different conditions in various parts of the country or the world.

- The length of the training periods makes it difficult for the people of the region to participate in vocational trainings.
- Lack of employment guarantee makes it difficult for the people of the region to participate in vocational trainings.
- It has been observed that the transitivity between industry and academia/vocational school is limited.
- It has been observed that there are problems in finding a job after the age of 45 due to the prevalence of unqualified jobs focusing on physical labour.
- It has been noticed that the international changes in the prominent sectors in the region are not followed and the medium and long-term risks in these sectors are not taken into consideration.

When focussing on the problems of the young population in the region, it is observed that the following points come to the fore:

- Lack of job opportunities and poor working conditions in the region (inflexible working hours, lack of career management, insufficient minimum wage)
- High labour turnover and increasing tendency towards seasonal labour
- Limited job opportunities directly related to the programme of study
- Lack of internship opportunities
- The prominent sectors in the region are not known by young people
- Public distrust in the quality of vocational training
- Difficulty in allocating additional resources to support existing education
- Foreign language barrier
- Lack of knowledge about different career opportunities and future jobs
- Concerns about social life
- Not being able to access training/incentive information in the region via social media
- Inability to access sufficient information on entrepreneurship
- Lack of development of digital skills

When focussing on the specific problems of the female population in the region, it is observed that the following points come to the fore:

- The problem of value-added employment in industry
- Inability to access sufficient information on entrepreneurship
- Nursery problem
- Restriction in women's social life due to home-education workload (cycle between home-education, lack of environment to develop business ideas, fatigue)
- Difficulty in allocating financial resources to support current education

Focusing on the problems preventing the integration of persons with disabilities in the labour market in the region, it is observed that the following points come to the fore:

- The training they can receive is mostly focussed on handicrafts
- Employment opportunities are limited with government incentives, insufficiency of private sector incentives
- Not being directed to professions with high added value and obstruction of career paths

In the light of these points, the following recommendations have been compiled:

- Awareness raising on trainings/incentives and use of social media should be encouraged.
- Studies should be carried out to raise awareness throughout the region regarding trainings/incentives.
- It is important to break the prejudice of the society against the quality of vocational education.
- Students' participation in vocational and social trainings should be incentivised in the form of extra grades or course credits.
- Field trips should be organised for students in order to raise their awareness.
- The participation of women and young people in vocational training should be encouraged and prioritised.
- It is important to actively share the examples of good practices in the regional area with the society in order to contribute to the projects.

- It is considered important to raise awareness in the society for the projects that set good examples at regional level.
- Training and incentives should not always be provided in the same areas and should keep pace with developing/changing global and local trends.
- Communication between employers and prospective employees should be strengthened, and necessary conditions should be provided for them to better understand each other's concerns and expectations.
- Awareness on the part of employers and employees about teleworking opportunities needs to be increased.
- It is considered important to raise awareness about non-traditional occupations.
- Raising awareness of the private sector is very important for the development of the region.
- In order to create private sector/industry collaborations, it is important to organise meetings involving stakeholders from both sides.
- It is suggested to add articles that will be binding for both parties in private sector/industry and MYO/university protocols.
- Strengthening the social life in the region is important especially in the medium and long term.

APPENDIX: Situation After the Earthquake

On 6 February 2023, an earthquake struck Türkiye and its aftermath is still ongoing. While the post-earthquake process and related recovery and repair works continue, measuring the extent of the destruction and analyzing the resulting damage is critical in revealing the challenges Türkiye faces as a result of such a natural event.

For this reason, the data obtained as a result of the research will be shown in the tables and graphs presented below and analyzed in the rest of this document.

In the first table below, the district-based housing damage assessment results of Malatya are presented in categories. When we analyze this table, it is observed that the number of demolished buildings is highest in Doğanşehir and then Yeşilyurt districts. In addition, Battalgazi district suffered the most damage in this category with 4,262 demolished independent sections.

When analyzed in the category of urgent demolition, it is seen that the number of buildings that need to be demolished urgently is the highest in Yeşilyurt district. In addition, Battalgazi district has the highest number of sections that need to be demolished urgently in the same category.

When we move on to the severely damaged dwellings section, it is seen that Yeşilyurt district has the highest number in terms of both buildings and independent areas. In comparison, Doğanyol district is the district with the least damage based on the data in this category.

When it comes to Moderately Damaged and Less Damaged categories, it is observed that Yeşilyurt and Battalgazi districts are again exposed to the most damage in both building and independent section categories. These districts are followed by Doğanşehir, Hekimhan and Yazıhan districts with the number of damaged buildings and independent sections.

When the undamaged category is analyzed, it is observed that Yeşilyurt and Battalgazi districts have the highest number of undamaged buildings and independent sections. On the other hand, the lowest number of undamaged buildings and independent sections are observed in Doğanyol and Kale districts.

Table 49: Malatya District Based Housing Damage Assessment Results

DISTRICT	DESTROYED		WILL BE DEMOLISHED URGENTLY		HEAVY		MIDDLE		LESS DAMAGED		NO DAMAGE	
	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION

AKÇADAĞ	1.0 04	1.279	82	122	5.549	7.137	132	242	4.020	5.850	4.895	5.802
ARAPGİR	17	17	0	0	142	189	6	7	293	471	3.341	5.586
ARGUVAN	25	27	6	7	463	558	3	4	661	906	2.179	2.757
BATTALGAZİ	494	4.262	593	5.488	8.093	28.583	1.158	9.221	14.929	64.497	11.915	28.774
DARENDE	167	173	19	29	2.003	2.564	80	263	2.673	3.700	5.718	10.518
DOĞANŞEHİR	1.7 66	2.759	347	755	5.387	8.711	281	805	3.801	5.886	2.846	3.550
DOĞANYOL	30	30	0	0	129	169	14	21	288	398	1.366	2.052
HEKİMHAN	51	54	2	2	890	1.127	37	54	1.822	2.425	6.301	9.328
KALE	12	12	0	0	266	343	26	51	521	792	1.651	2.623
KULUNCAK	3	3	4	5	278	377	12	32	707	896	2.061	2.553
PÜTÜRGE	96	114	2	3	908	1.140	29	82	898	1373	2.294	3.738
YAZIHAN	102	125	12	31	1.249	1.446	27	36	1.654	2073	2.572	3.343
YEŞİLYURT	1.2 83	3.645	743	2.475	10.689	37.373	978	9.063	16.423	68292	13.686	29.355
TOTAL	**5.0 50**	**12.500**	**1.81 0**	**8.917**	**36.046**	**89.717**	**2.783**	**19.881**	**48.690**	**157.559**	**60.825**	**109.979**

Source: (Ministry of Environment, Urbanization and Climate Change, 2023)

On the other hand, the following tables show the number of firms and the number of employments in the Organized Industrial Zones in Malatya. When this table is analyzed, it is seen that the two regions have similar numbers, but the table shows that the number in the first region is higher compared to the second region.

Table 50: Organized Industrial Zones in Malatya

PLACE	NUMBER OF COMPANIES	NUMBER OF EMPLOYMENT
1.OSB	195	18.500
2.OSB	189	17.030

Source: (Fırat Development Agency, 2023)

The next table presents the post-earthquake damage status of the areas in Malatya Industrial Zone. According to the data in the table, it is seen that most of the buildings and independent sections examined are included in the category of slightly damaged and undamaged.

Table 51: Damage Status in Organized Industrial Zones After the February 6, 2023, Earthquake

DAMAGE CASE	NUMBER OF BUILDINGS	NUMBER OF INDEPENDENT SECTIONS
Severely Damaged	17	18
Medium Damaged	26	26
Slightly Damaged	135	139
undamaged	267	277
not accessible	67	71
Total	**512**	**531**

Source: (Ministry of Environment, Urbanization and Climate Change, 2023)

The table below shows the damage assessment data for Özsan Industrial Site and Yeni Industrial Site. When this table is examined, it is observed that the estimated loss of labor force is estimated as 3,600 people and the estimated loss of production is estimated as TL 238,136,000.

Table 52: Damage Assessment Data of Özsan Industrial Site and New Industrial Site

SS Total Area in the City Center (m2)	1.608.700
Total Number of Workplaces in SS in the City Center	2.890
Number of People Working in SS in the City Center	7.562
Number of Heavily Damaged Buildings in SS	365
Number of Medium Damaged Buildings in SS	0
Number of Slightly Damaged Buildings in SS	462
Estimated labor force loss	3.600 people
Estimated production loss	238.136.000-TL

Source: (Fırat Development Agency, 2023)

The next table shows the damage assessment results of Malatya accommodation facilities. When this table is analyzed, it is seen that the total number of severely damaged hotels in the two categories is 10 and the total number of destroyed hotels is 6.

Table 53: Damage Assessment Results of Malatya Accommodation Facilities

Damage Status	Hotel with Tourism Operation Certificate	Simple Accommodation Certified Hotel	Total

This project is co-financed by the European Union
and the Republic of Türkiye.

Undamaged	5	3	**8**
Slightly Damaged	7	8	**15**
Medium Damaged	2	4	**6**
Severely Damaged	2	8	**10**
Destroyed	3	3	**6**
Total	**19**	**26**	**45**

Source: (Ministry of Environment, Urbanization and Climate Change, 2023)

The table below shows the results of Elazığ damage assessment. When this table is examined, we can see that the highest damage in the collapsed category is in Baskil, Merkez and Palu regions in both building and independent section categories. Again, when we look at the heavy damaged section by including both categories, it is seen that the heaviest damage is in the Central region, followed by Maden region as the second most heavily damaged region.

Table 54: Elazığ Damage Assessment Results

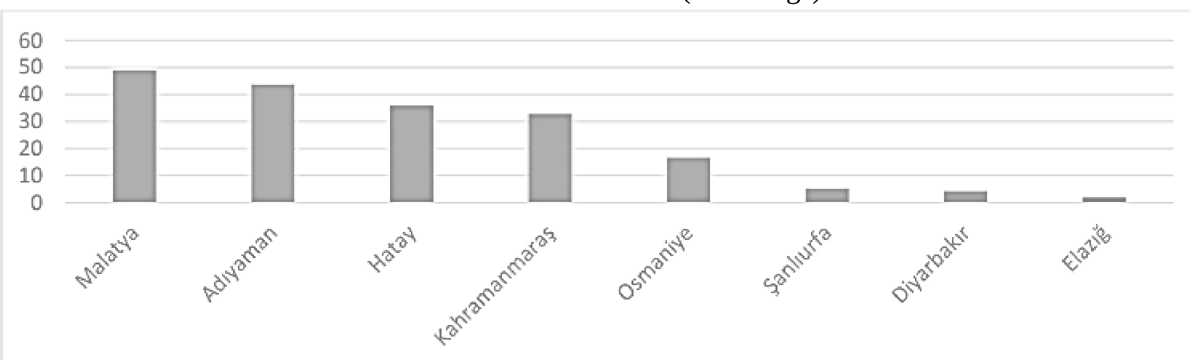
DISTRICT	DESTROYED		WILL BE DEMOLISHED URGENTLY		HEAVY		MIDDLE		LESS DAMAGED		NO DAMAGE	
	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION	BUILDING	INDEPENDENT SECTION
AĞIN	0	0	0	0	5	11	1	3	17	36	33	77
ALACAKAYA	1	1	2	4	289	521	1	2	154	290	159	301
ARICAK	0	0	5	5	224	413	14	42	185	481	211	558
BASKİL	11	16	2	3	498	784	6	14	255	431	217	636
KARAKOÇAN	7	7	8	14	469	716	20	47	279	638	417	2.374
KEBAN	1	2	0	0	85	135	9	25	113	178	204	349
KOVANCILAR	3	4	1	4	386	660	50	169	322	838	541	3.759
MADEN	7	11	0	0	766	1.415	18	52	401	787	354	601
MERKEZ	11	19	30	148	3.944	10.428	368	1.686	5.835	37.738	9.074	78.734
PALU	11	14	0	0	620	1.041	17	24	203	582	399	3.068

SİVRİCE	1	1	0	0	155	221	2	3	181	294	158	250
TOTAL	**53**	**75**	**48**	**178**	**7.441**	**16.345**	**506**	**2.067**	**7.945**	**42.293**	**11.767**	**90.707**

Source: (Ministry of Environment, Urbanization and Climate Change, 2023)

In the graph given below, the ratio of heavy and medium damaged accommodation facilities destroyed in the earthquake region to the accommodation facilities examined is given as a percentage. When these percentages are analyzed, it can be observed that the damage in Malatya, Adıyaman and Hatay is higher compared to Şanlıurfa, Diyarbakır and Elazığ.

Graphic **4**: Ratio of Destroyed, Severely and Moderately Damaged Accommodation Facilities to Inspected Accommodation Facilities (Percentage)



Source: (Ministry of Culture and Tourism 2023)

When the damage assessment data in the heavily damaged regions of Bingöl province presented in the table below are analyzed, it is seen that the highest number of demolished and heavily damaged households is in Genç district. This district is followed by Adaklı district and the central region as the regions with the second and third highest number of demolished/heavily damaged households.

Table 55: Damage Assessment Data in Intensively Damaged Areas in Bingöl Province

DISTRICT	GENERAL NUMBER OF HOUSEHOLDS	NUMBER OF DESTROYED / HEAVILY DAMAGED HOUSES	NUMBER OF HOUSES WITH LOW DAMAGE	DAMAGED BUILDING TOTAL
ADAKLI	551	162	217	**379**
GENÇ	647	248	98	**346**
KARLIOVA	37	0	11	**11**
KIĞI	46	0	10	**10**

MERKEZ	2.174	119	240	**359**
SOLHAN	2	0	2	**2**
YAYLADERE	65	16	22	**38**
TOTAL	**3.522**	**545**	**600**	**1.145**

Source:(Ministry of Environment, Urbanization and Climate Change, 2023)

The next table shows the damage assessment data in the heavily damaged regions of Tunceli province. Pertek district has the highest number of demolished/heavily damaged households with 43 demolished/heavily damaged households out of the total number of 128 demolished/heavily damaged households. The district with the highest number of households with less damage, totalling 187 households, is Ovacık district with 53 households, and Çemişgezek district with 51 households is the second district with the highest number of households with less damage.

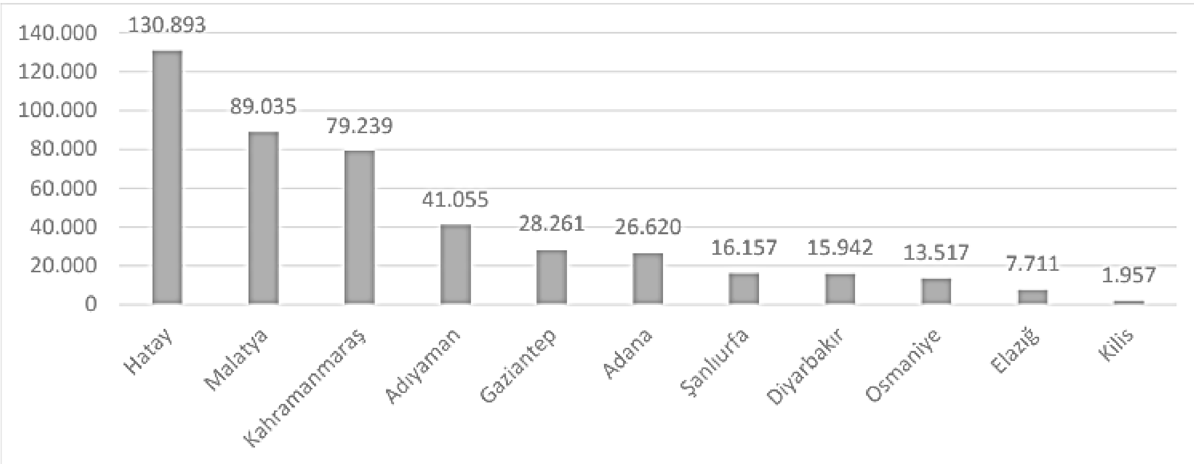
Table 56: Damage Assessment Data in Intensively Damaged Regions in Tunceli Province

DISTRICT	NUMBER OF DESTROYED / HEAVILY DAMAGED HOUSES	NUMBER OF HOUSES WITH LOW DAMAGE	DAMAGED BUILDING TOTAL
ÇEMİŞGEZEK	22	51	**73**
HOZAT	17	7	**24**
MAZGİRT	3	5	**8**
MERKEZ	15	15	**30**
NAZIMİYE	4	2	**6**
OVACIK	17	53	**70**
PERTEK	43	38	**81**
PÜLÜMÜR	7	16	**23**
TOTAL	**128**	**187**	**315**

Source:(Ministry of Environment, Urbanization and Climate Change, 2023)

The graph below shows the number of citizens migrating from the earthquake-stricken regions. When these numbers are analyzed, it is seen that the province with the highest number of emigrants is Hatay, followed by Malatya.

Graphic 5: Number of People Residing in Provinces in the Earthquake Zone and Declaring Address in a Different Province



Source: (*TURKSTAT, 2023*)

In the table below, AFAD lists the provinces where the disaster victims travelled to after the earthquake. When the table is analyzed, it is shown that the disaster survivors primarily went to Istanbul, Ankara and Antalya. The provinces with the highest return rates among the 10 most travelled provinces are İzmir and Antalya.

Table 57: Provinces Where Disaster Victims Went to After the Earthquake

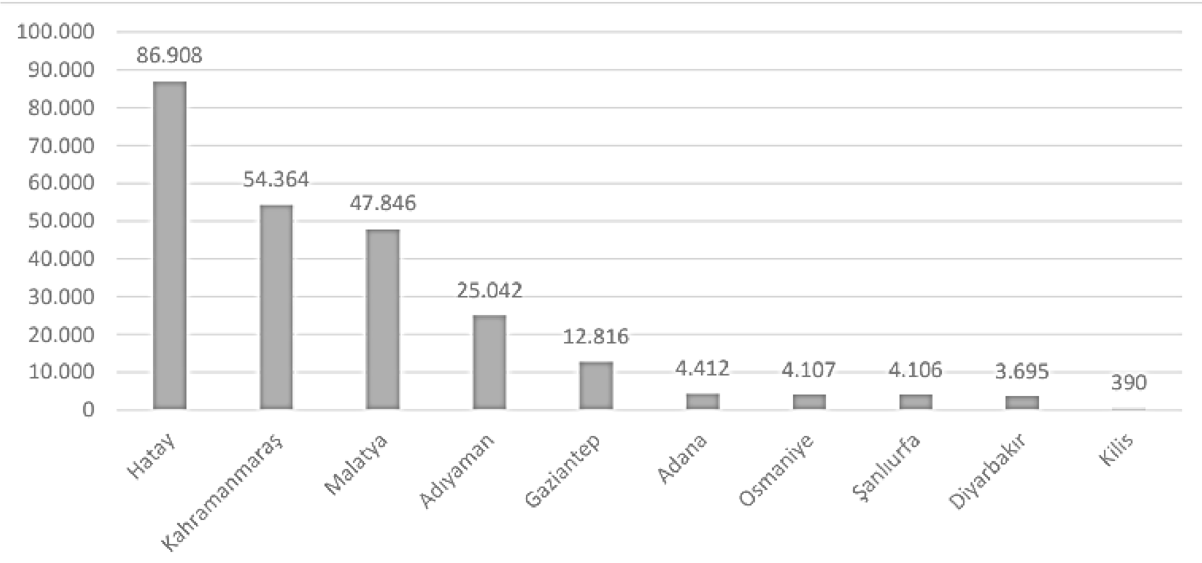
Order	Provinces Visited	Outgoing Disaster Survivor	Returning Survivor	Returning Rate
1.	İstanbul	72.829	1.238	1,7%
2.	Ankara	48.326	2.780	5,8%
3.	Antalya	18.712	5.651	30,2%
4.	Sivas	17.144	1.255	0,7%
5.	İzmir	15.494	6.000	38,7%
6.	Mersin	15.184	1.080	7,1%
7.	Bursa	9.382	1.334	14,2%
8.	Konya	9.092	686	7,5%
9.	Kayseri	8.262	1.147	13,9%
10.	Samsun	6.480	0	-

	Other Provinces	117.910	28.476	24,2%
	TOTAL	**338.815**	**48.517**	**14,3%**

Source: (AFAD, 2023)

The graph below shows the number of students transferred from the provinces in the earthquake zone, based on the data provided by the Ministry of National Education. According to the data in this graph, the highest number of student transfers from the provinces in the disaster zone were from Hatay, Kahramanmaraş and Malatya.

Graphic 6: Number of Students Transferred from Provinces in the Earthquake Region



Source: (MEB, *2023)*

In the table below, the provinces where students were transferred after the earthquake are listed with the data provided by MEB. According to this table, it is shown that the students who were transferred were primarily in Ankara, Istanbul and Elazığ.

Table 58: Provinces with Student Transfers After the Earthquake

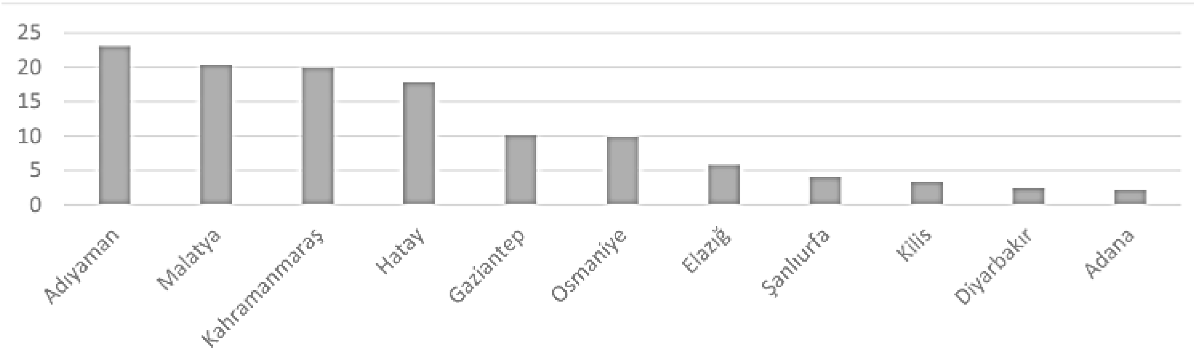
Order	Transferred Provinces	Primary education	Secondary education	Total
1.	Ankara	4.640	1.843	**6.483**
2.	İstanbul	3.917	1.147	**5.064**
3.	Elazığ	3.611	1.097	**4.708**

4.	Sivas	1.663	541	**2.204**
5.	Antalya	1.660	448	**2.108**
6.	İzmir	1.496	471	**1.967**
7.	Mersin	1.514	382	**1.896**
8.	Bursa	1.063	358	**1.421**
9.	Konya	1.078	336	**1.414**
10.	Kayseri	868	290	**1.158**
	Other Provinces	15.151	4.272	**19.423**
	TOTAL	**36.661**	**11.185**	**47.846**

Source:(Ministry of National Education Transfer Data, 2023)

When the graph below is analyzed, the categorized damage rates of the educational facilities in the provinces in the earthquake zone are observed. Here, it is revealed that Malatya's educational facilities are exposed to more damage compared to the majority of the other provinces in the earthquake zone.

Graphic 7: Ratio of Demolished, Urgently Demolished, Heavy and Medium Damaged Educational Facilities to All Educational Facilities (Percentage)



Source: (*MEB, 2023*)

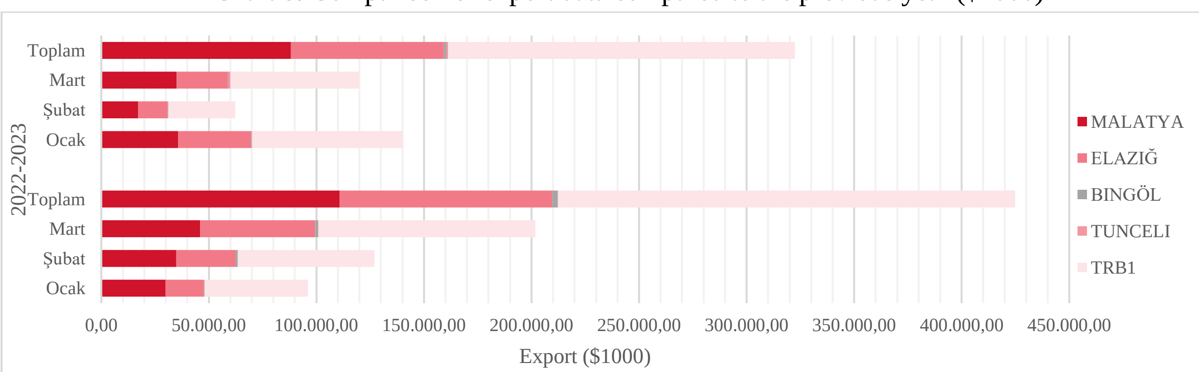
In the next table and graph, it is seen that export data are compared by considering the years 2022 and 2023. When the data of the two years are compared, the realized exports show a decrease of 24.09% in TRB1 in 2023 compared to 2022. Likewise, when the export performances of the provinces are compared between the two years, a decrease of 20.4% in Malatya, 28.08% in Elazığ and 57.58% in Bingöl is observed. On the other hand, an increase of 568 per cent is observed in Tunceli.

Table 59: Comparison of export data compared to the previous year ($1000)

Export Performance in 2022					Export Performance in 2023				
Provinces	**Fireplace**	**February**	**March**	**Total**	**Provinces**	**Fireplace**	**February**	**March**	**Total**
MALATYA	29.889,97	34.847,12	45.953,55	**110.690,64**	**MALATYA**	35.768,34	17.259,70	35.075,91	**88.103,96**
ELAZIĞ	17.817,25	27.626,90	53.532,69	**98.976,83**	**ELAZIĞ**	33.903,23	13.585,72	23.693,55	**71.182,50**
BINGÖL	321,88	988,79	1.306,33	**2.617,00**	**BINGÖL**	396,58	278,40	435,68	**1.110,66**
TUNCELI	0,00	38,53	85,10	**123,62**	**TUNCELI**	41,62	8,76	771,95	**822,34**
TRB1	**48.029,09**	**63.501,33**	**100.877,67**	**212.408,09**	**TRB1**	**70.109,78**	**31.132,59**	**59.977,09**	**161.219,45**

Source: (TİM, 2023)

Chart 8: Comparison of export data compared to the previous year ($1000)



Source: (Turkish Exporters Assembly, 2023)

In the next table, the change in electricity consumption of the industrial sector is presented. Here, it is observed that the electricity consumption, which generally increased, decreased in both Elazığ and Malatya in February 2023. Subsequently, electricity consumption in Elazığ increased again in March 2023, while it continued to decrease in Malatya.

Table 60: Electricity Consumption Change in the Industrial Sector

Province Name	Industrial Sector Electricity Consumption (MWh)					
	October 2022	**November 2022**	**December 2022**	**January 2023**	**February 2023**	**March 2023**
Elazığ	12.649	19.434	15.753	16.172	15.786	20.003
Malatya	10.496	7.784	10.094	8.263	6.123	4.676

Source: (Turkish Republic Ministry of Agriculture and Forestry, 2023)

The graph and figure below show the working hours lost due to earthquake among provinces. Here, it is clearly seen that Malatya has a higher rate of lost working hours.

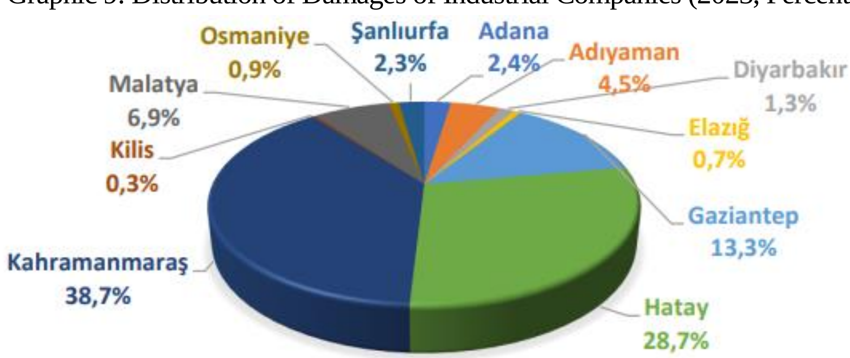
Table 61: Working Hours Lost by Province, as of March 2023, Compared to the Situation in 2021 (%)

Province	Lost Working Hours (%)
Malatya	58.8%
Adıyaman	48.1%
Hatay	45.2%
Kahramanmaraş	43.1%
Kilis	6.7%
Osmaniye	6.4%

Source: (Pre-disaster population (TURKSTAT), displacement data (Facebook), building damage assessment report (T.C Environment, Ministry of Urbanization and Climate Change) and the ILO based on the central/non-central status of the district.)

The graph given below shows the percentage of damages in industrial firms in the provinces affected by the earthquake. In this graph, it is seen that industrial firms in Kahramanmaraş and Hatay provinces suffered much more damage compared to other provinces.

Graphic 9: Distribution of Damages of Industrial Companies (2023, Percentage)

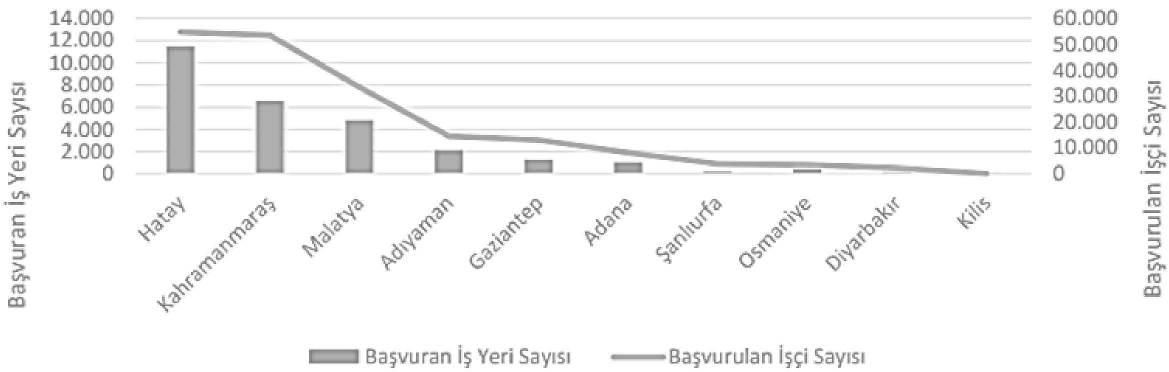


Source: (Ministry of Industry and Technology, 2023)

The next graph shows the short time working allowance applications made until April 2023 based on İŞKUR data. These data indicate that a total of 28,058 workplaces and 187,084 workers applied for short time working allowance in the earthquake zone and the highest number of applications were made in Hatay

(11,464 workplaces and 54,749 workers), Kahramanmaraş (6,551 workplaces and 53,552 workers) and Malatya (4,813 workplaces and 33,402 workers).

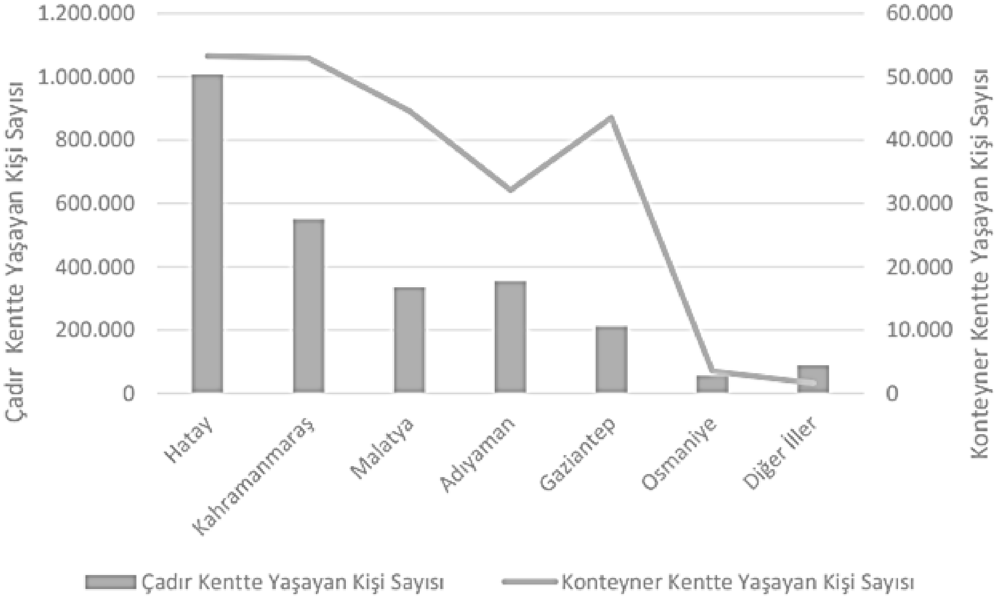
Graphic **10**: Short time Working Allowance Applications (Until April 2023)



Source: (İŞKUR*, 2023)*

When the graph below, which is created with the data provided by AFAD, is analyzed, it is seen that temporary shelter services are provided in earthquake zones in the form of tents and tent cities, containers and container cities. As of the given date, a total of 2,836,262 people is provided with temporary shelter, of which 2,604,760 people benefit from this service in tent cities and tents and 231,502 people benefit from this service in containers and container cities. The graph shows that the majority of earthquake victims benefiting from this service are in Hatay, Kahramanmaraş and Malatya.

Graphic 11: Number of People Living in Temporary Shelter Areas (April 2023)



Source: (AFAD, *2023)*

Source

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