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## SUPPORT FOR TRANSITION TO LABOR MARKET PROJECT

### PROVINCE-BASED SOCIO-ECONOMIC SECTOR CURRENT SITUATION REPORT

ADANA



REPUBLIC OF TÜRKİYE  
MINISTRY OF LABOUR AND  
SOCIAL SECURITY



TÜRK  
KIZILAY



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## TÜRK KIZILAY COMMUNITY-BASED MIGRATION PROGRAMS SOCIO-ECONOMIC EMPOWERMENT PROGRAM

### SUPPORT FOR TRANSITION TO LABOR MARKET PROJECT PROVINCE-BASED SOCIO-ECONOMIC SECTOR CURRENT SITUATION REPORT

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# PROVINCE-BASED SOCIO-ECONOMIC SECTOR CURRENT SITUATION REPORT (ADANA)



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## ABBREVIATIONS

<b>ADNKS</b>	: Address Based Population Registration System
<b>AOIZ</b>	: Adana Organise Industry Zone
<b>BAG-KUR</b>	: Independent Employees Social Security Institution Community
<b>FSSWs</b>	: Foreign Semi-Skilled Workers
<b>GDP</b>	: Gross Domestic Product
<b>GVA</b>	: Gross Value Added
<b>IEP</b>	: On-the-Job Training Programs
<b>IPSHA</b>	: International Protection Status Holders and Applicants
<b>ISKUR</b>	: Turkish Employment Agency
<b>KOSGEB</b>	: Small and Medium Enterprises Development Organization of Türkiye
<b>NACE</b>	: Statistical Classification of Economic Activities of the European
<b>SPP</b>	: Solar Power Plants
<b>SSBS</b>	: Industrial Registry Information System
<b>SSI</b>	: Social Security Institution
<b>SSN</b>	: Social Safety Net
<b>SuTP</b>	: Syrians under Temporary Protection
<b>TURKSTAT</b>	: Turkish Statistical Institute



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# INTRODUCTION

Adana is one of Türkiye's largest cities and a major center of industry, agriculture, and trade. With its strategic location, advanced transportation infrastructure, fertile agricultural lands, and dynamic workforce, Adana plays a critical role in regional and national economic development. Adana has a strong economic structure in logistics, service, and agriculture sectors alongside its traditional industrial production activities. However, globalization, technological advancements, demographic shifts, and macroeconomic fluctuations continue to affect the structure and dynamics of Adana's labor market. In recent years, changes in Adana's labor market have become more pronounced, especially with demographic mobility, migration and sectoral shifts. The city has a labor market shaped not only by local workforce, but also by migrant labor. In particular, the integration of Syrians under Temporary Protection (SuTP) into the region creates both opportunities and challenges in the labor market. In this context, in order to achieve a sustainable and inclusive structure of the labor market, it is of great importance to develop employment policies that will ensure the integration of the local population and the migrant population into economic life. In this context, developing employment policies that ensure the economic integration of both local and migrant populations is of great importance for achieving a sustainable and inclusive labor market structure.

The Adana Socio-Economic Sector Current Situation Report analyzes the socio-economic and sectoral current situation in Adana. The report consists of five sections: Literature Review, Secondary Data Analysis, Analysis and Findings of the Survey, Analysis and Findings of the In-Depth Interviews, and General Evaluation and Policy Recommendations.

In the literature review, existing studies on the province of Adana were examined and prominent sectors were evaluated. Topics such as unemployment, migrant labor, and vocational training are discussed from the employers' perspective. The section also summarizes evaluations regarding sectoral employment dynamics and the demand for skilled, unskilled, young, female, and seasonal labor.

The secondary data analysis section evaluates population, labor force participation, employment, social security, working conditions, and migration data for Adana province,



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primarily based on statistics from TURKSTAT, ISKUR, the Social Security Institution (SSI), the Ministry of Labor and Social Security, and the Presidency of Migration Management.

As part of the fieldwork, in addition to in-depth interviews conducted in Adana province, a survey was conducted to (56) stakeholders to broaden the base of insight. The findings of this survey are discussed in detail in the third section. The results of the in-depth interviews are presented in the fourth section. Finally, in the fifth section, policy recommendations are proposed based on the entire dataset and analysis, with the aim of promoting sustainable employment and social cohesion.

The Adana Socio-Economic Sector Current Situation Report provides a comprehensive framework for decision-makers and stakeholders involved in employment processes to understand the structure of the local labor market and make strategic decisions. In particular, public and private sector representatives seeking to enhance labor market integration can benefit from the report's insights into key employment sectors, employer expectations, and effective job placement strategies. Accordingly, the report serves as a valuable resource for policy-makers, business leaders, and researchers, offering an overview of Adana's current socio-economic and labor market dynamics. Moreover, it aims to contribute to sustainable development efforts by offering strategic roadmaps for the optimal utilization of the region's economic potential.

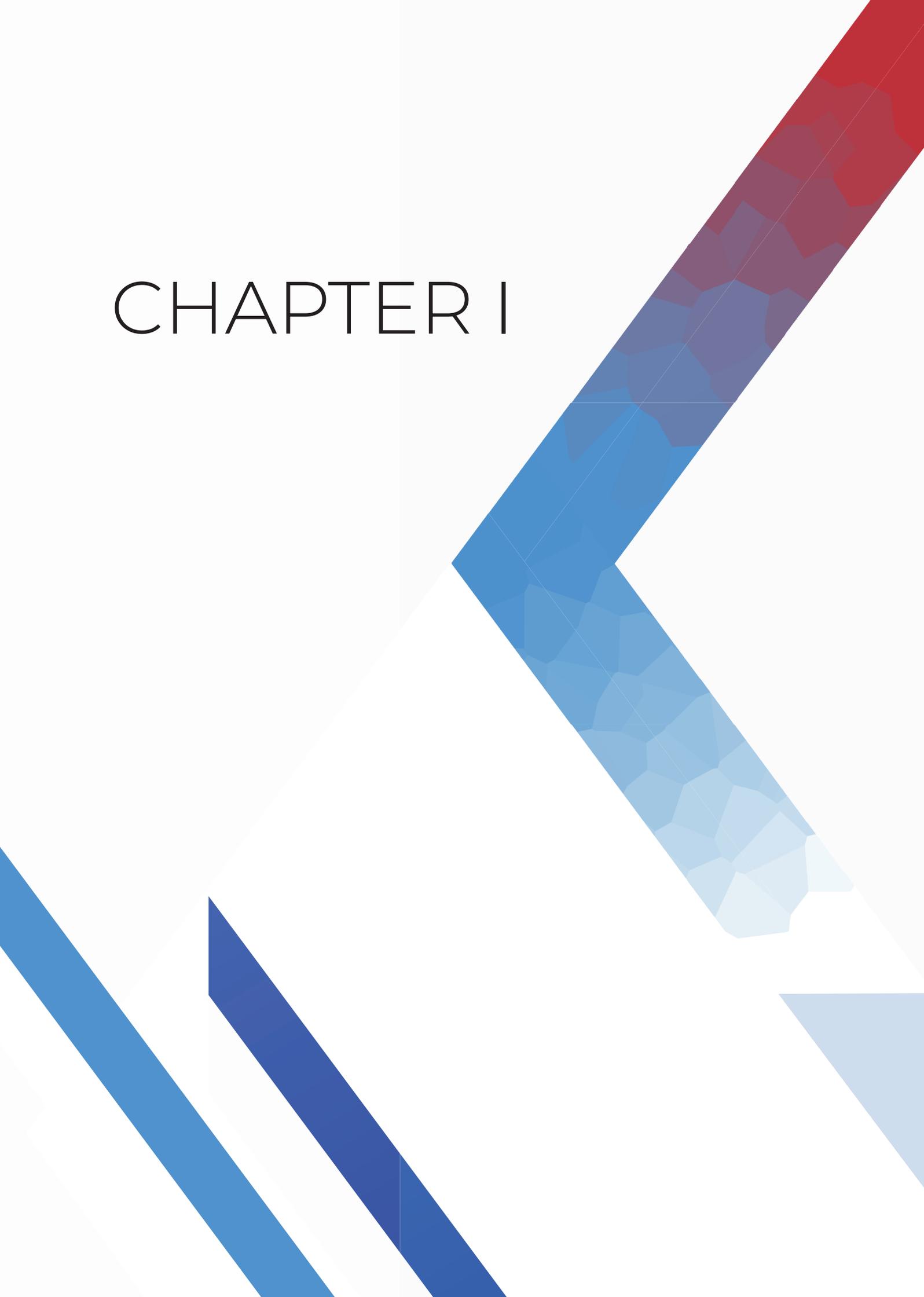


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This report aims to serve as a comprehensive resource for policymakers, business representatives, and academics by presenting the current socio-economic dynamics of the labor market in Adana.

# CHAPTER I

The image features a white background with several abstract geometric elements. A prominent feature is a diagonal band that runs from the top right towards the bottom center. This band is filled with a mosaic of irregular, overlapping shapes in various shades of blue and red, creating a textured, crystalline appearance. In the bottom left corner, there are several solid-colored diagonal stripes in shades of blue and dark blue. The overall composition is clean and modern, with a focus on geometric patterns and color contrast.



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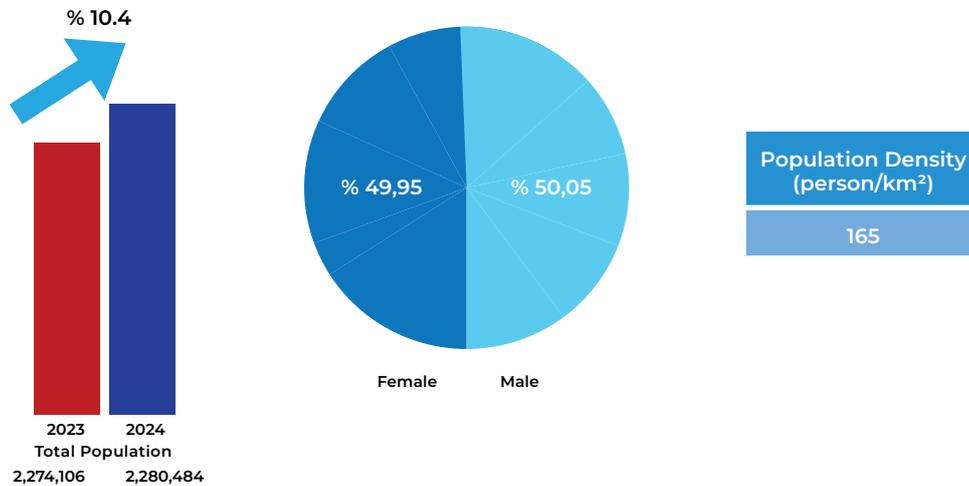
# CHAPTER I

## 1. LITERATURE REVIEW - ANALYSES ON DEMOGRAPHIC, SOCIO-ECONOMIC STRUCTURE AND LABOR AND EMPLOYMENT SITUATION IN ADANA

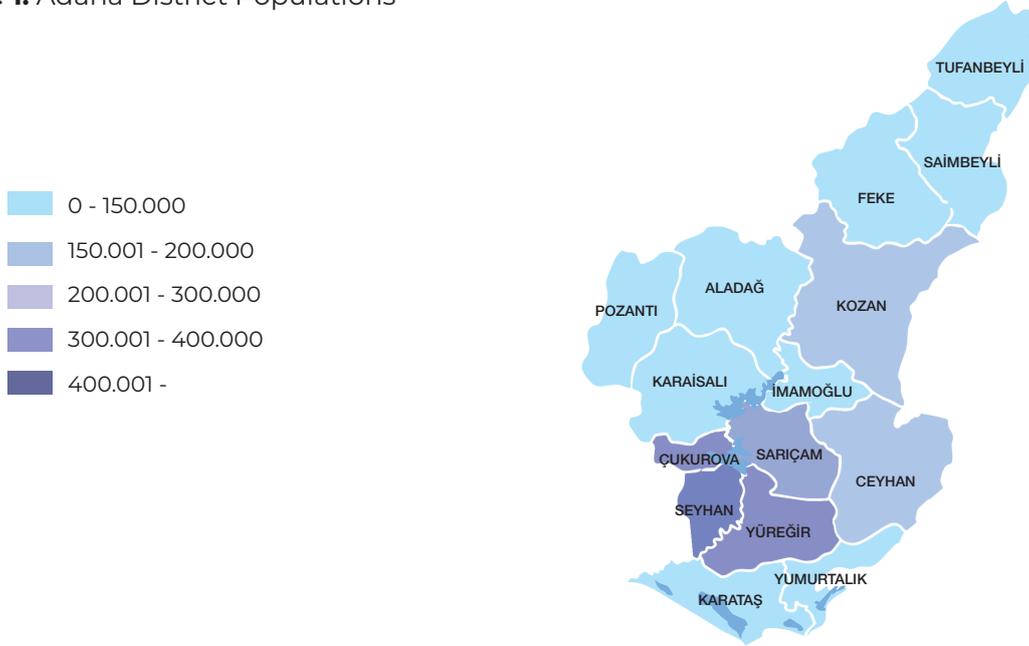
Adana's history dates back to ancient times. Located in the southern foothills of the Taurus Mountains, near the Seyhan River, this region has historically served as a strategic hub along key trade routes. Throughout its history, Adana has been home to many civilizations including the Hittites, Assyrians and Persians, and stood out as a significant center of trade and agriculture during the Ottoman Empire (Adana Provincial Employment and Vocational Training Board Annual Report, 2023, p. 4). During the Republican period, industrialization gained momentum, and Adana emerged as one of Türkiye's leading industrial cities.

In terms of its social and economic structure, Adana has a diversified economy based on agriculture, industry, and services. The province plays a critical role in the production of cotton, wheat, corn, and citrus fruits, thanks to the fertile lands of the Çukurova region. Additionally, the Adana Organized Industrial Zone (AOIZ) significantly contributes to both regional and national economic output, particularly in the food processing, textile, and chemical industries (Çukurova Development Agency, 2014–2023, p. 35).

**Graphic 1.** Demographic Overview of Adana



**Figure 1.** Adana District Populations



In terms of demographic structure, Adana ranks as the sixth most populous province in Türkiye. As of 2023, the population of Adana was 2,274,106, and this figure increased to 2,280,484 in 2024 an increase of 10,186 people, corresponding to a growth rate of 0.45%. According to gender distribution data, the male population stands at 1,140,836, while the female population is 1,139,648. Among the districts, Seyhan is the most populous, with 786,931 residents as of 2024. According to 2024 data, the population of Seyhan is 786,931. Other large districts include Yüreğir (399,910), Çukurova (378,650) and Sarıçam (251,259). The total surface area of Adana is 13,844 km<sup>2</sup>, and the population density the number of people per square kilometer is calculated as 165 people/km<sup>2</sup>. This density provides insight into the settlement patterns and demographic profile of the province. While 40 provinces in Türkiye reported a decline in population by 2024, Adana experienced growth, highlighting the province's continued economic and social attractiveness. The majority of the population is concentrated in urban districts such as Seyhan and Çukurova. However, a rural lifestyle centered on agricultural production persists in non-urban areas. In Adana, seasonal agricultural workers and migrant labor play a notable role in the local economy. Nonetheless, the female labor force participation rate in the province remains below the national average (Adana Labor Market Report, 2023, p. 18).

Adana is one of Türkiye's most important cities both historically and economically. Its economic diversity in various sectors and rich agricultural potential reinforces its place in the Turkish economy. With future investments, Adana is expected to play an increasingly significant role in the industrial and energy sectors (Adana Provincial Employment and Vocational Training Board Annual Report, 2023, p. 28). In terms of its place in the Turkish economy, Adana has a strategic importance with both its agricultural production and industrial potential. Adana contributes greatly to the Turkish economy, especially in the export of agricultural products. In industrial production, investments in the energy and chemical sectors stand out. Adana is also on its way to becoming an international center in the energy sector with the Ceyhan Energy Specialized Industrial Zone (Adana Economy Report, 2023, p. 22).

This section compiles key insights from the literature regarding the labor market in Adana province, highlighting its most prominent features.

### 1.1. Effects of Regional, Cultural and Economic Factors

With an area of 13,844 km<sup>2</sup> and a population of 2,280,484 in 2024, Adana accounts for 2.67% of Türkiye's population. With a population density of 165 people/km<sup>2</sup>, it ranks 14th among other provinces in Türkiye. The working age population (15-64 years) is 1,511,354, reflecting the province's labor force potential. The province ranks ninth in Türkiye in terms of youth population and this group is considered as an important resource especially in the service and industrial sectors (Table 2).



**Table 1.** Demographic Breakdown of Adana by Variable

Indicators	Value	Share in Türkiye (%)	Provincial Ranking
Province area (km <sup>2</sup> )	13,844	1,77	15,00
Population (2021)	2,263,373	2,67	7,00
Population growth rate (per thousand) (2020/2021)	2,06	-	62,00
Population density (people/km <sup>2</sup> ) (2021)	163	14,00	14,00
Working age population (15-64 years) (2021)	1,511,354	2,63	7,00
Young population (15-24 years) (2021)	338,841	2,61	9,00
Total number of active insured (2021)	548,478	2,22	8,00
Number of compulsory insured (4/a) (2021)	340,305	2,10	9,00
Industry (05+35-09-33) number of compulsory insured (4/a) (2021)	94,096	2,08	11,00
Gross domestic product (GDP) at current prices (Thousand TRY) (2021)	141,672,580	1,95	10,00
Industrial GDP at current prices (BCDE) (Thousand TRY) (2021)	40,811,795	2,16	9,00
Manufacturing GDP at current prices (C) (Thousand TRY) (2021)	34,083,264	2,12	9,00
GDP per capita (USD) (2021)	6,977	-	38,00
Exports (Thousand USD) (2021)	2,543,056	1,13	16,00
Imports (Thousand USD) (2021)	3,545,959	1,31	9,00
Foreign trade balance (Thousand USD) (2021)	- 1.002.902	-	76,00
Ratio of exports to imports (%) (2021)	71,72	-	71,00
Total deposits (Million TRY) (2021)	76,206	1,55	7,00
Total loans (Million TRY) (2021)	77,234	1,76	7,00
Loans/deposits (%) (2021)	101,35	-	36,00
Number of incentive certificates (Number) (2021)	356	2,79	11,00
Incentive certificate fixed investment amount (Million TRY) (2021)	9,472	3,45	11,00

Source: TURKSTAT, 2023

Adana ranks 8th in Türkiye in terms of the total number of active insured people, while the number of employees with compulsory industrial insurance supports the province's industry-oriented economic structure. In terms of economic performance, Adana's gross domestic product (GDP) at current prices is TRY 141,672 million, accounting for 1.95% of Türkiye's GDP. The share of the industrial sector in GDP is 40,811 million TRY, which proves that the industrial sector is one of the economic cornerstones of the province. The GDP of the manufacturing sector at current prices is 34,083 million TRY. Exports are 2,543 million USD, ranking 16th in Türkiye; however, imports exceed exports with 3,545 million USD. This shows that the province has a deficit in terms of foreign trade balance. The ratio of exports to imports in Adana is 71.72%, indicating the need to increase the export potential in industry-oriented production.

In terms of financial indicators, Adana's total deposits amount to TRY 76,206 million and total loan volume is TRY 77,234 million. The loan-to-deposit ratio of 101.35% is close to Türkiye's average. In terms of incentive certificates, 356 certificates were issued and the fixed investment amount was realized as 9,472 million TRY. These data underscore the critical role of incentive policies in supporting Adana's economic development. With its strong industrial, agricultural, and energy sectors, along with its strategic location as a logistics hub, Adana is positioned as one of Türkiye's most strategically significant cities. To ensure sustained economic growth, export-oriented strategies and increased investment are essential.

Figure 2 shows the development ranking, scores and development levels of the districts in Adana province in Türkiye and within the province. The most developed district of Adana is Seyhan, which ranks 42nd among 973 districts. Seyhan has the highest score in terms of economic, social and infrastructural development in the province and is at the first level of development. Seyhan is followed by Çukurova, ranked 76th, and Sarıçam, ranked 149th. These districts perform better in key indicators such as education, health and trade and are at the second level of development. Yüreğir, Ceyhan, and Kozan are among the districts classified as having a medium level of development. While Yüreğir is notable for its contributions to the industrial and agricultural sectors, Ceyhan stands out due to its strategic potential in the energy and logistics sectors. However, infrastructure deficiencies and insufficient social indicators in these districts limit their ability to reach higher levels. Pozantı, İmamođlu and Yumurtalık are in the fourth tier of development and have a more limited economic and social development due to their rural nature.

The districts at the bottom of the table, such as Tufanbeyli, Karaisalı, Karataş, Aladağ, Saimbeyli and Feke, are at the fifth and sixth level of development. These districts are defined as less developed regions due to their rural population density, agriculture-oriented economy and limited infrastructure facilities. This situation highlights a development area that requires targeted projects and strategic investments for improvement. In particular, districts such as Aladağ, Saimbeyli and Feke have the lowest development rankings both in Türkiye and in Adana province.

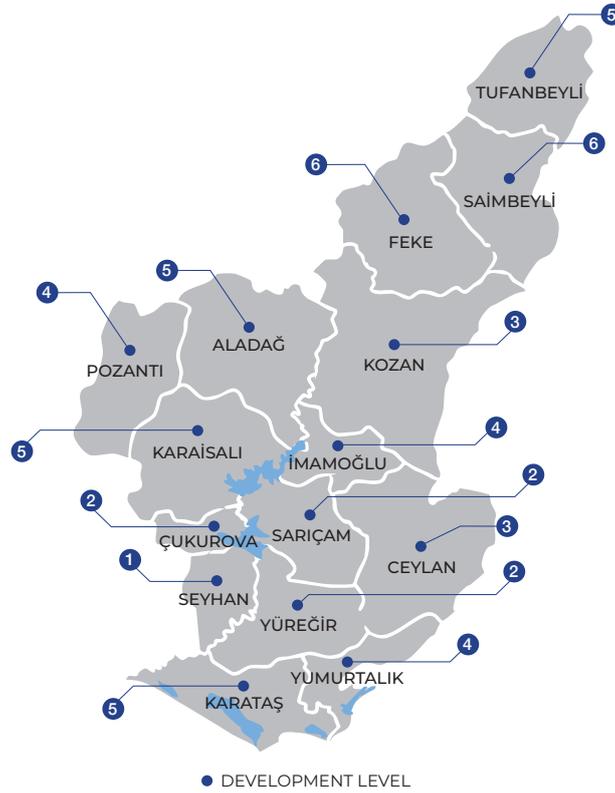
**The most developed district of Adana is Seyhan, which ranks 42nd among 973 districts. Seyhan has the highest score in terms of economic, social and infrastructure in the province and is at the first level of development. Seyhan is followed by Çukurova ranked 76th and Sarıçam ranked 149th.**



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**Figure 2.** Adana District Development Rankings



While the total number of employees in Türkiye is 4,178,065, the number of employees in Adana is 90,068. The Adana is home to 2.16% of total employees. This shows that Adana's contribution to the labor force in Türkiye is limited, but it has significant shares in certain occupational groups.

The most striking group in Table 3 is workers. While workers constitute 68.13% of the total number of employees in Türkiye with 2,846,464 people, this rate is 67.86% in Adana. There are 61,121 workers in Adana, indicating that workers are the dominant group of employees in both Türkiye and Adana. This indicates a structure in which labor-based sectors such as industry and agriculture are predominant.



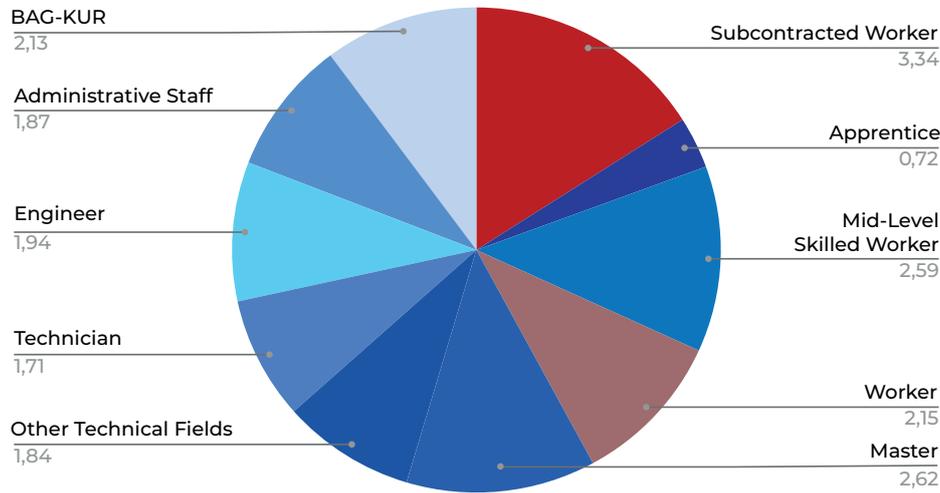
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**Table 2.** Breakdown of Industrial Employment by Employee Type

Employee Type	Türkiye - Number of Employees	Türkiye - Share (%)	Adana - Number of Employees	Adana - Share (%)	Share in Türkiye (%)
Engineer	174,209	4,17	3,380	3,75	1,94
Technician	137,529	3,29	2,353	2,61	1,71
Other Technical Fields	69,138	1,65	1,275	1,42	1,84
Master	270,432	6,47	7,098	7,88	2,62
Worker	2,846,464	68,13	61,121	67,86	2,15
Mid-Level Skilled Worker	14,187	0,34	368	0,41	2,59
Apprentice	19,517	0,47	141	0,16	0,72
Subcontracted Worker	143,418	3,43	4,785	5,31	3,34
BAG-KUR	55,968	1,34	1,191	1,32	2,13
Administrative Staff	447,203	10,7	8,356	9,28	1,87
<b>Total</b>	<b>4,178,065</b>	<b>100</b>	<b>90,068</b>	<b>100</b>	<b>2,16</b>

**Graphic 2.** Breakdown of Industrial Employment by Employee Type



Engineers, technicians and other technical staff are less common in Adana compared to Türkiye as a whole. Engineers make up 4.17% of total employees in Türkiye, compared to 3.75% in Adana. Similarly, technicians are represented by 2.61% in Adana compared to 3.29% in Türkiye. This shows that the qualified technical labor force in Adana is below the national average.

The rate of subcontracted workers in Adana is slightly higher than in Türkiye. While subcontracted workers make up 3.43% of total employees in Türkiye, this rate is 5.31% in Adana. This indicates that temporary and project-based work is common in Adana. In addition, the low rates of journeymen and apprentices compared to Türkiye's average suggest that the vocational training and apprenticeship system may be less developed in Adana.

The following sections provide information on the prominent sectors in Adana.

### 1.1.1. Agriculture and Livestock Sector

The Adana is one of Türkiye's leading agricultural and livestock centers thanks to its geographical location, favorable climate and fertile soils. The fertile lands of the Çukurova region support the intensive cultivation of high-value crops such as cotton, corn, wheat, and citrus fruits. While increased agricultural mechanization reduces the need for labor, it also leads small-scale farmers to withdraw from production due to economic pressures. In addition, agricultural irrigation problems and changing climatic conditions pose long-term challenges to the sector.

The Adana's agriculture is characterized by citrus, cereals and oilseed crops. The Adana accounts for 32% of Türkiye's citrus production and is the leader in corn production (Adana Economy Report, 2023). Cotton production plays a major role in Adana's agricultural activities, both as an important raw material for the textile industry and for its economic contributions. In addition, oilseed crops such as peanuts and soybean production are among the important crops that increase agricultural diversity. Greenhouse farming supports year-round vegetable production by ensuring continuity through the use of modern agricultural techniques. (Adana Provincial Directorate of Agriculture and Forestry, 2023).

Among cereal crops, wheat and corn have an important place in Adana agriculture. These crops are used for both domestic consumption and industrial production. The Adana is the leading corn producer in Türkiye, accounting for about 20% of the country's total corn production. Cotton production also plays an important role in Adana's agricultural activities. Called the **"white gold"**, cotton provides raw materials for the textile industry and contributes significantly to the economy (Adana Agriculture Report, 2021).

The livestock sector is characterized by intensive cattle and ovine breeding and poultry

farming. According to 2021 data, Adana has 266,601 cattle and 1,116,289 ovine animals. In addition, the poultry sector produces both meat and eggs with 7,204,123 chickens. However, the lack of modern techniques in animal husbandry stands out as an important factor limiting productivity in the sector. In recent years, various projects have been implemented to increase productivity through government incentives and modern agricultural practices.

Seasonal agricultural labor plays a particularly critical role in Adana during the harvest periods of cotton and citrus crops. The integration of migrant workers into the sector is an important issue for the sustainability of the agricultural sector. However, the working conditions of seasonal workers need to be improved and their social security needs to be ensured. On the other hand, with the spread of modern agricultural techniques, the need for specialized labor is increasing. The lack of a workforce with a good command of digital agricultural practices and precision agricultural techniques negatively affects the competitiveness of the sector (Labor Market and Youth Employment Report, 2018, p. 40).

The Adana's agriculture and livestock sector makes significant contributions to the Turkish economy. However, modern techniques need to be disseminated, water management problems need to be addressed, and labor quality needs to be improved. To ensure sustainability in agricultural production and make the sector more competitive, it is important to use modern irrigation systems, promote digital agriculture practices, increase vocational training programs, and strengthen support mechanisms to increase productivity in animal husbandry. Such investments will further strengthen Adana's leading position in the agriculture and livestock sector.

### 1.1.2. Industry and Manufacturing Sector

The Adana is one of Türkiye's major industrial cities, particularly in textiles, chemicals, food processing and metal products manufacturing. The presence of the Adana Organized Industrial Zone (AOIZ) supports the growth of these sectors. However, economic factors such as the lack of skilled labor in the industrial sector and rising energy costs slow down the growth of some enterprises. Moreover, competition in global markets and lack of access to modern technologies are among the factors limiting industrial growth.



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**Table 3.** GDP Trends in Türkiye and Adana by Sector (2016–2021)

Year	Türkiye's Total GDP (A) (Million TRY)	Türkiye's Industrial GDP (B) (Million TRY)	Türkiye's Manufacturing GDP (C) (Million TRY)	Share of Industrial GDP in Türkiye's Total GDP (B)/(A) (%)	Share of Manufacturing GDP in Türkiye's Total GDP (C)/(A) (%)	Adana's Total GDP(D) (Million TRY)	Adana's Total Industrial GDP (E) (Million TRY)	Adana's Total Manufacturing GDP (F) (Million TRY)
2016	2,626,506	514,902	435,890	19,60	16,60	52,807	9,983	7,959
2017	3,133,704	646,827	551,276	20,64	17,59	61,402	12,716	10,441
2018	3,758,774	854,654	715,797	22,28	19,04	75,102	16,095	13,138
2019	4,111,373	914,160	764,802	22,23	18,60	83,834	18,548	14,746
2020	5,048,203	1,204,840	965,942	23,86	19,13	109,033	25,834	19,588
2021	7,248,789	1,858,149	1,509,790	26,05	22,21	141,673	40,812	34,083
<b>2016-2021 change (%)</b>	<b>175,98</b>	<b>266,70</b>	<b>269,31</b>	-	-	<b>168,28</b>	<b>308,79</b>	<b>328,23</b>
Year	Shares of Sectors in Adana GDP - Industry (E)/(D) (%)	Shares of Sectors in Adana GDP - Manufacturing (F)/(D) (%)	Province's Share in Türkiye - GDP (D)/(A) (%)	Province's Share in Türkiye - Industrial GDP (E)/(B) (%)	Province's Share in Türkiye - Manufacturing GDP (F)/(C) (%)	Ranking of the Province in Türkiye - GDP	Ranking of the Province in Türkiye - Industrial GDP	Ranking of the Province in Türkiye - Manufacturing GDP
2016	18,91	15,07	2,01	1,94	1,83	8	10	12
2017	20,84	17,01	1,97	1,97	1,89	9	9	12
2018	22,90	17,49	2,00	1,88	1,84	9	9	12
2019	22,77	17,59	1,99	2,03	1,93	9	9	12
2020	23,69	17,97	2,16	2,14	2,03	9	9	12
2021	28,81	24,06	2,16	2,20	2,26	9	9	12
<b>2016-2021 change (%)</b>	-	-	-	-	-	-	-	-

Adana's industrial GDP at current prices increased rapidly in the 2016-2021 period compared to Türkiye. The share of Adana's industrial and manufacturing sectors in the province's total GDP has also increased significantly. The upward trends of the industrial and manufacturing sectors in GDP indicate that the economic structure of the province has become more industry-oriented (Table 3).



The Adana's performance is also noteworthy in terms of sectoral growth rates and Türkiye-wide rankings. In the ranking based on provincial industrial GDP, Adana rose from 10th place in 2016 to 9th place in 2021. Similarly, in the ranking based on manufacturing GDP, Adana rose from 12th place in 2016 to 9th place in 2021. These rankings emphasize that the province's development in the industrial and manufacturing sectors has increased its competitiveness in Türkiye.

The Adana is one of Türkiye's major industrial centers with a total industrial area of 6,630.93 hectares as of 2021. Of these areas, 2,094.41 hectares are organized industrial zones (OIZ), 183.7 hectares are industrial estates, 1,937.82 hectares are industrial zones, 460 hectares are free zones, and 1,955 hectares are areas outside planned industrial areas. This diversity shows that Adana's industrial infrastructure has a comprehensive and organized structure.

When the scale distribution of industrial enterprises operating in Adana is analyzed, it is seen that 61.9% are micro, 27.8% are small, 8.6% are medium and 1.69% are large-scale enterprises. This distribution shows that the industrial structure of the city is largely composed of SMEs.

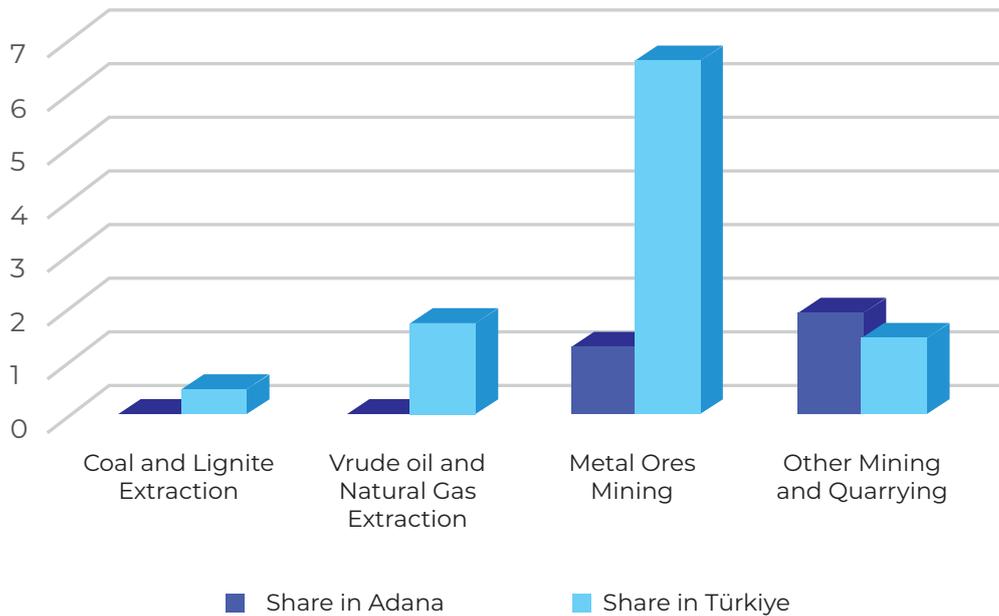
The Adana also has a strong presence in organized industrial zones, including key areas such as the Hacı Sabancı Organized Industrial Zone and the Yumurtalık Free Zone. These zones provide investors with advanced infrastructure and significant logistical advantages, enhancing the city's overall industrial capacity. Adana's manufacturing industry initially developed from agriculture-based sectors, but over time, it has diversified into a wide range of industries, including metal processing, machinery manufacturing, and chemical production. With its advanced transportation networks, strategic location and organized industrial zones, Adana continues to be one of Türkiye's major industrial centers.

According to the Industrial Registry Information System (IRIS) records, a total of 3,284 industrial enterprises were operating in Adana in 2021. Of these enterprises, 430 operate in OIZs, 720 in industrial estates and 2,134 outside the planned industrial areas. Looking at the sectoral distribution of enterprises, 94.40% operate in manufacturing, 3.05% in mining and 2.56% in energy. The manufacturing sector constitutes the largest part of the industrial enterprises in Adana. Manufacturing enterprises in Adana represent 2.22% of the total enterprises in Türkiye. Food products manufacturing is the leader in Adana's manufacturing sector with 709 enterprises and a 21.59% share. Textiles (5.12%) and chemicals (4.54%) are other prominent sectors in Adana's industrial structure. However, the manufacture of

rubber and plastic products (8.37%) and fabricated metal products (10.02%) are also sectors that increase the economic diversity of the province. The energy sector in Adana has a share of 2.56% with a total of 84 enterprises. Electricity, gas, steam and air conditioning production and distribution is the main field of activity in this sector.

The Adana's performance in the industrial and manufacturing sectors has shown remarkable growth both regionally and nationally. This strong development in the industrial and manufacturing sectors has strengthened the economic structure of the province and has elevated its position in the Turkish economy. This demonstrates the effectiveness of investments in the Adana's industrial and manufacturing sectors and highlights the importance of sustainable policies for these sectors in the future.

**Graphic 3.** Share of Mining and Quarrying Sector in Adana and Türkiye





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**Table 4.** Sectoral Breakdown of Industrial Enterprises in Adana (2021)

Sector (NACE Rev 2)	Türkiye - Number of Enterprises	Türkiye - Share (%)	Adana - Number of Enterprises	Adana - Share (%)	Sectoral Share in Türkiye (%)
<b>B. Mining and quarrying</b>	<b>5,055</b>	<b>3,39</b>	<b>154</b>	<b>3,05</b>	<b>1,98</b>
01. Coal and lignite extraction	228	0,15	1	0,03	0,44
02. Crude oil and natural gas extraction	123	0,08	2	0,06	1,63
03. Metal ores mining	593	0,4	39	1,19	6,58
04. Other mining and quarrying	4,111	2,76	58	1,77	1,41
<b>C. Manufacturing</b>	<b>139,507</b>	<b>93,66</b>	<b>3,100</b>	<b>94,4</b>	<b>2,22</b>
05. Manufacture of food products	21,481	14,42	709	21,59	3,3
06. Manufacture of beverages	550	0,37	14	0,43	2,55
07. Manufacture of tobacco products	95	0,06	6	0,18	6,32
08. Manufacture of textile products	11,752	7,89	168	5,12	1,43
09. Manufacture of clothing	9,477	6,36	155	4,72	1,64
10. Manufacture of leather and related products	2,974	2	49	1,49	1,65
11. Manufacture of wood, wood products and cork products	6,284	4,22	148	4,51	2,36
12. Manufacture of paper and paper products	2,495	1,68	79	2,41	3,17
13. Printing and reproduction of recorded media	2,182	1,46	25	0,76	1,15
14. Manufacture of coke and refined petroleum products	239	0,16	9	0,27	3,77
15. Manufacture of chemicals and chemical products	4,698	3,15	149	4,54	3,17
16. Basic pharmaceutical products and pharmaceuticals. im.	264	0,18	3	0,09	1,14
17. Manufacture of rubber and plastic products	10,485	7,04	275	8,37	2,62
18. Manufacture of other non-metallic mineral products	8,024	5,39	113	3,44	1,41
19. Basic metal industry	4,141	2,78	87	2,65	2,1
20. Manufacture of fabricated metal products	15,883	10,66	329	10,02	2,07
21. Manufacture of computers, electronic and optical products	1,449	0,97	28	0,85	1,93
22. Electrical equipment manufacturing	4,238	2,85	78	2,38	1,84
23. Manufacture of machinery and equipment not elsewhere classified	14,366	9,65	299	9,1	2,08
24. Manufacture of motor vehicles, trailers and semi trailers	2,465	1,65	42	1,28	1,7
25. Manufacture of other means of transportation	767	0,51	11	0,33	1,43
26. Furniture manufacturing	12,171	8,17	255	7,76	2,28
27. Other manufacturing	3,027	2,03	69	2,1	2,28
<b>D. Electricity, gas, steam and air conditioning production and distribution</b>	<b>4,381</b>	<b>2,94</b>	<b>84</b>	<b>2,56</b>	<b>1,92</b>
28. Production and distribution of electricity, gas, steam and ventilation systems	4,381	2,94	84	2,56	1,92
<b>Industry Total</b>	<b>148,943</b>	<b>100</b>	<b>3,284</b>	<b>100</b>	<b>2,2</b>

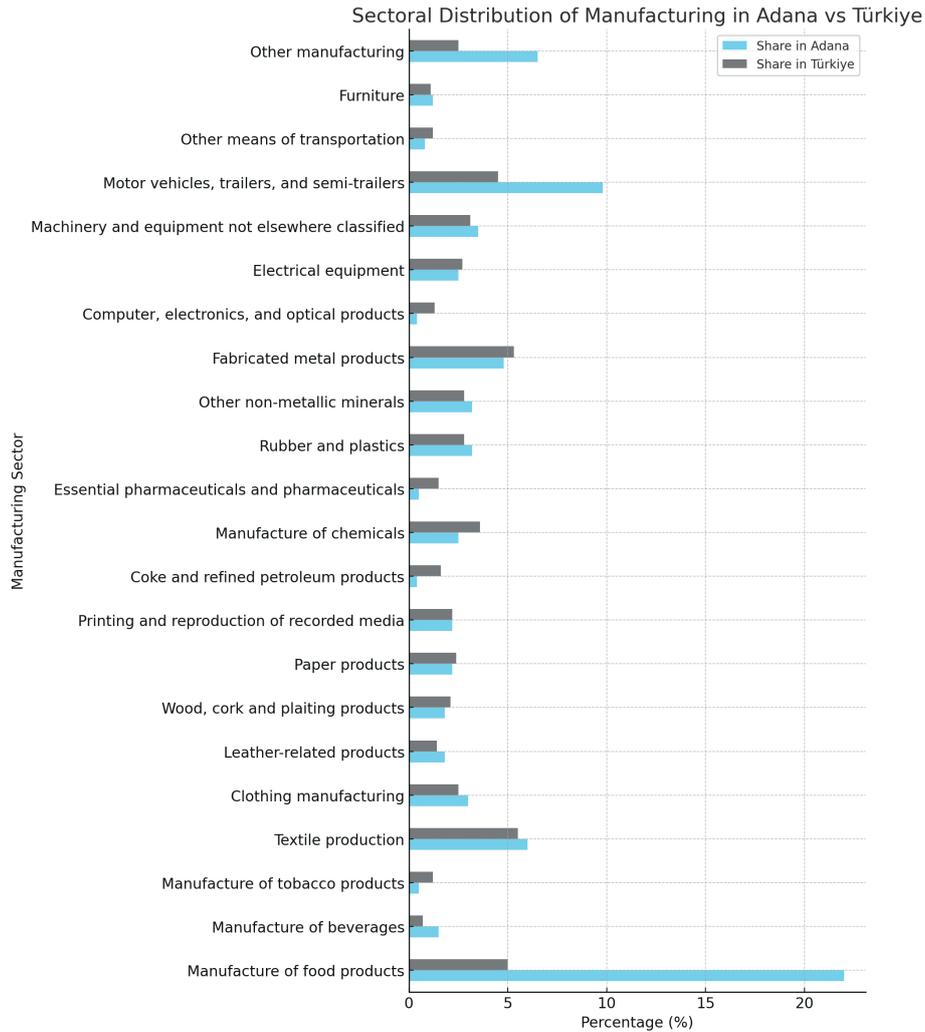
Source: TurkStat 2021 Report



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**Graphic 4.** Manufacturing Sector Share in Türkiye and Adana



### 1.1.3. Service and Tourism Sector

Despite Adana's natural and cultural richness, the tourism sector underperforms its potential. While gastronomy tourism stands out with Adana kebab and local delicacies, development in areas such as nature tourism and sea tourism remains limited due to infrastructure deficiencies and insufficient promotional activities. Insufficient accommodation facilities in the districts reduce tourists' interest in the region. In terms of congress and fair tourism, Adana has an important position on a national scale, but more promotion and infrastructure investments are needed to compete on an international level (Çukurova Development Agency, 2020).

The lack of qualified labor in the tourism sector poses a major problem, especially in terms of language skills. The shortage of foreign language-speaking personnel makes communication in the service sector difficult. Increasing the level of vocational training of individuals working in tourism, improving service quality and increasing accommodation investments will contribute to better utilization of Adana's tourism potential.

#### 1.1.4. Trade, Energy and Logistics

The Ceyhan Energy Specialized Zone has made Adana a strategic center in the energy sector. This development strengthens the region's energy infrastructure and allows logistics activities to grow. However, growth in these sectors is dependent on international investment and is directly affected by economic fluctuations.

The chemical industry is recognized as one of the largest industries on a global scale, and Adana stands out with its production capacity and access to raw materials. While the chemical industry creates significant employment in Adana, the petrochemical industry also provides high added value to the regional economy. Adana's industrial infrastructure and proximity to ports provide advantages in the production and export of chemical products. The Ceyhan Energy Specialized Industrial Zone, which plays a critical role in the development of the chemical industry in Adana, offers a favorable environment for large-scale petrochemical investments. The plastics and rubber industry, one of the largest sub-branches of the chemicals sector, is an important economic activity in Adana. Developments in the plastics sector are in line with the general growth trend of the chemical industry, and a large portion of Türkiye's plastic raw material needs are still met through imports. In order for Adana to increase its export capacity in this area, more investment is needed in R&D activities and production infrastructure (Çukurova Development Agency, 2021).

In order for Adana's chemical sector to increase its international competitiveness, it is essential to train a qualified workforce. The employment gap in the sector is particularly pronounced for chemical engineers, technicians and skilled workers to be involved in production processes. Therefore, it is recommended to expand vocational training programs and strengthen industry-university cooperation.

The management of environmental impacts is of great importance for the sustainable development of the chemical industry. Adoption of environmentally friendly production

techniques and the enhancement of chemical waste management processes are considered inevitable for sustainable industrial development. Harmonization with European Union standards, especially in waste management, will provide a competitive advantage in both local and international markets.

The Adana's largest export items in the chemical sector include polyethylene, polypropylene, petrochemical-based paint raw materials and cleaning products. Most of these products are exported to Middle Eastern and European markets, and it is stated that logistics facilities need to be strengthened in order to increase the export potential of the region. In this context, it is suggested to expand the port infrastructure in Adana and ensure the integration of railway networks with industrial zones.

One of the biggest problems encountered in the sector is foreign dependence on raw material supply. Most producers in Adana rely on imported raw materials, which significantly increases production costs. To address this issue, it is essential to enhance domestic production capacity and improve Türkiye's self-sufficiency in the petrochemical sector.

The Adana's renewable energy potential offers great room for development thanks to its geographical location and climatic conditions. In particular, the high capacity for solar energy makes Adana attractive for solar power plants. The annual sunshine duration and radiation levels in the region increase energy efficiency and create opportunities for domestic and foreign investors. However, investments in this area need to be incentivized and financing opportunities need to be increased. In terms of wind energy, although there is investment potential in certain regions of Adana, overall wind speeds are not at the desired levels. Although there are suitable areas for wind power plants in high altitude regions such as Pozantı, it is foreseen that this energy source may remain limited throughout Adana. As the renewable energy sector develops, the demand for skilled labor is increasing. Therefore, it is recommended to expand vocational training programs and strengthen university-industry collaborations. Strengthening infrastructure investments, modernizing electricity grids and advancing energy storage technologies are essential to achieving a sustainable balance between energy production and consumption. Moreover, financing is one of the biggest obstacles to renewable energy investments due to high initial costs. Mechanisms such as low-interest loans, state-supported incentives and tax reductions can increase investments by accelerating the private sector's orientation towards this field (Çukurova Development Agency, 2012).



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## 1.2. The Impact of Technological and Sectoral Developments on the Labor Market

Technological innovations and industrial developments are causing fundamental changes in the labor market. Innovations such as automation, artificial intelligence (AI) and the Internet of Things (IoT) are transforming production processes, reducing the demand for low-skilled labor and increasing the need for technology-oriented occupational groups. In particular, fields such as data science, software development and robotic engineering are among the rising professions in the labor market and are in high demand by employers (Labor Market and Youth Employment Special Expertise Commission Report, 2018, p. 37).

New technologies are increasing productivity in the industrial and manufacturing sectors, while reducing the number of low-skilled jobs. With the spread of automation, routine tasks on production lines are performed by machines, transforming the need for labor. In industrial cities like Adana, this effect is particularly pronounced in the textile and metal products manufacturing. The Adana Organized Industrial Zone (AOIZ) is one of the centers experiencing the effects of technological transformation on the workforce most intensely (Adana Chamber of Commerce, 2023, p. 14).

With the impact of digitalization and Industry 4.0, the demand for certain occupational groups is increasing rapidly. Data analysts, software engineers, energy technologists, and mechatronics engineers are attracting the attention of employers as they have the knowledge and skills required by new industrial systems. The employment potential of engineers working in the renewable energy sector has also increased. In addition, the demand for e-commerce and digital marketing specialists has accelerated in parallel with the growth of the digital economy (Çukurova Regional Plan, 2014-2023, p. 38).

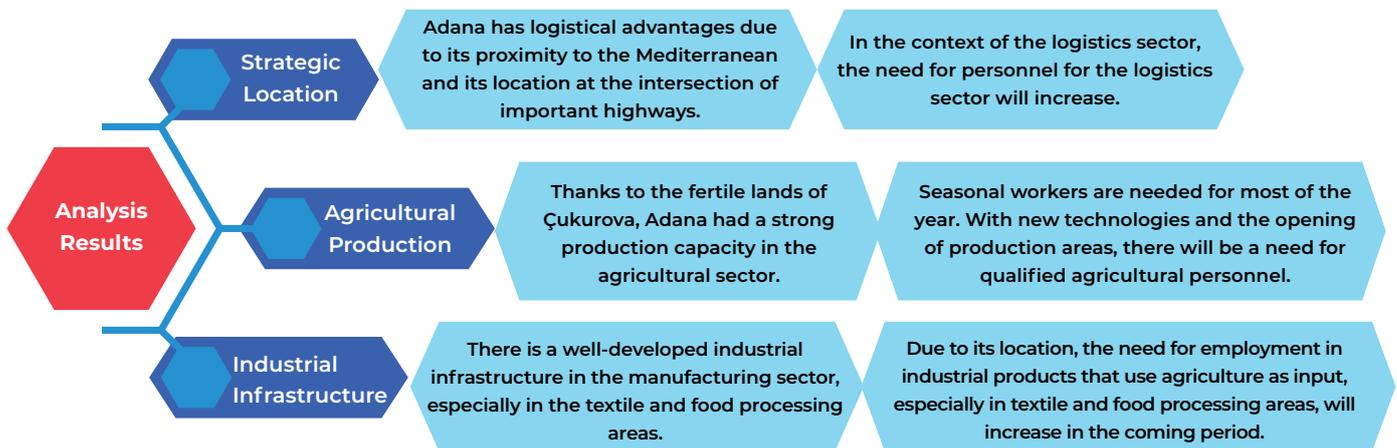


However, this transformation poses a threat to low-skilled labor and increases the risk of unemployment. Workers on assembly lines and office workers involved in tasks such as basic data entry are at risk of losing their jobs due to automation systems. Vocational training and reskilling programs should be expanded to solve this problem (Adana Labor Market Report, 2023, p. 22).

New technologies and industrial developments are increasing the demand for skilled jobs in the labor market, while reducing the demand for low-skilled jobs. In industrial cities like Adana, this change is particularly felt in the industrial and service sectors.

Therefore, aligning the education and training systems with the requirements of digital transformation is essential to ensure that the workforce can effectively adapt to emerging technologies. Promoting vocational training and entrepreneurship is an important strategy to respond to changing labor demands (Labor Market and Youth Employment Report, 2018, p. 42).

**Figure 3.** Findings from the Literature Review on Adana



### 1.3. Employers' Perceptions and Preferences towards Migrant Workers

This section presents the general perceptions and perspectives of the employers in Adana province regarding the target group labor force.

Employers often see migrant workers as a source of labor that can work at lower costs. Migrant workers are preferred for low-skilled jobs, especially in agriculture, construction and service sectors. However, some employers keep a distance from migrant workers due to language barriers, cultural incompatibility and lack of professional skills (Labor Market and Youth Employment Report, 2018, p. 39). However, in regions with dense migrant populations, such as Adana, migrant labor is an indispensable resource in the agricultural sector (Çukurova Regional Plan, 2014-2023, p. 45).

Employers' perceptions on the employment of people with disabilities are generally limited to obligations and legal requirements. Although there are incentives and supports provided by the government for the integration of people with disabilities into the labor force, employers' preferences for this group are limited. The main reasons for this include the costs of adapting the working conditions of people with disabilities in the workplace and productivity concerns (Adana Labor Market Report, 2023, p. 22). However, employment of people with disabilities in the public sector is higher than in the private sector.

Current employment policies in Türkiye allow migrant workers to work legally, especially in low-skilled jobs. Procedures related to work permits and the integration of migrants into the social security system constitute the main components of these policies. However, informal employment is quite common among migrant workers, leading to violations of their social security rights (Labor Market and Youth Employment Report, 2018, p. 41). In Adana, unregistered employment of migrant workers is common, especially in the agriculture and construction sectors.

Employers face barriers in the recruitment of migrant workers, such as language barriers, complexity of legal authorization processes and cultural adaptation issues. In addition, the inability of migrants to document their professional qualifications and the reluctance of employers to include this group in training processes also pose a significant problem. Especially in regions such as Adana, there are additional challenges in integrating seasonal agricultural workers into the permanent workforce (Adana Economy Report, 2023, p. 33).

Vocational training and development opportunities for migrant workers are very limited. Most employers do not offer training programs for migrant workers in low-skilled jobs. However, some vocational training programs are being implemented with the support of public institutions and civil society organizations. These programs aim to support migrants in learning Turkish and developing vocational skills (Çukurova Regional Plan, 2014-2023, p. 50).

#### **1.4. Sectoral Employment Trends: Demand for Skilled, Unskilled, Youth, Female, and Seasonal Labor**

The sectors that provide the most employment in and around Adana are industry, services and agriculture. The Adana Organized Industrial Zone (AOIZ), in particular, provides employment in the manufacturing sector, while the service sector provides employment in education, health and retail. The agriculture sector is an important source of labor, especially in rural areas, and offers seasonal employment opportunities with Adana's citrus, cotton and corn production (Adana Economy Report, 2023, p. 14).

Demand for skilled labor is increasing, especially in technology-oriented sectors and industry. In Adana, there is a high demand for skilled labor in areas such as software engineering, data science, mechatronics and energy technologies. In addition, the development of renewable energy and automation technologies has increased the need for engineering and technical personnel. In the service sector, the demand for qualified labor continues in the fields of health and education (Çukurova Regional Plan, 2014-2023, p. 42).

Demand for unskilled labor is mostly concentrated in the agriculture and construction sectors. The agricultural sector needs unskilled labor intensively, especially in activities such as citrus picking and corn harvesting. In the construction sector, the need for physical laborers and unskilled workers is quite high. Migrant workers play an important role in these sectors in Adana (Labor Market and Youth Employment Report, 2018, p. 40).

Demand for young labor is increasing, especially in the technology, e-commerce and service sectors. In the retail and logistics sectors, young employees are preferred due to flexible working hours. In addition, there are employment opportunities for interns and newly graduated engineers in the industrial sector. However, the high youth unemployment rate causes problems in meeting this demand (Adana Labor Market Report, 2023, p. 21).

Women's employment is recognized as one of the cornerstones of social development that supports economic growth (World Bank, 2023). However, analyses at the national and regional levels reveal that women's participation in the labor market remains at low levels compared to men (TURKSTAT, 2022).

Previous studies on women's employment indicate that gender-based labor force differentials are associated with various economic and social factors (Kabeer, 2021). Education differences and childcare responsibilities are cited as the main reasons for women's low labor market participation in Türkiye (OECD, 2022). The sectoral distribution of women's employment at the regional level reveals in which areas working women are concentrated and in which sectors employment opportunities should be increased (TURKSTAT, 2022).

According to TURKSTAT (2022), the manufacturing sector has the highest female employment in Adana province, with 35.2% of total female employment in this sector. In particular, textile, food and chemical industries are among the sub-sectors where female employment is concentrated. The highest female employment rate is in the human health and social services sector, where 61.5% of women are employed (TURKSTAT, 2022). However, the labor market participation rate of women is significantly lower than that of men. In the TR62 (Adana and Mersin) region, the labor force participation rate of men is 71.2%, while that of women is 33.4%. Housework and care responsibilities are among the main factors preventing women from entering the labor market (TURKSTAT, 2022).

**In Adana province, manufacturing sector has the highest female employment rate and 35.2% of total female employment is in this sector.**

In terms of unemployment rates, female unemployment is higher than male unemployment. In Adana, the female unemployment rate is 16.9%, while the male unemployment rate is 10.1%. The difficulties women face in finding a job stem from factors such as inflexible working hours, lack of vocational training and sectoral employment differences (ISKUR, 2024). When the open job positions in the region are analyzed, the areas with the highest employment deficit are determined as manufacturing sector, health sector and service sector. There is a shortage of employees especially in professions such as physical laborers, machine operators, garment workers and health personnel. Implementing incentives to increase women's employment in these areas can contribute to reducing gender inequalities in the labor market (ISKUR, 2024).

Demand for female labor is higher in the education, health and service sectors. Especially in professions such as teaching and nursing, female employment is at the forefront. In industrial cities such as Adana, the concentration of women in the textile sector is noteworthy. However, the demand for women's labor in rural areas remains low and this is attributed to social norms and traditional roles (Çukurova Regional Plan, 2014-2023, p. 48).

Seasonal labor demand is particularly concentrated in the agricultural sector in Adana. There is an intense need for labor during the harvest periods of crops such as citrus, cotton and corn. During these periods, mostly migrant workers and temporary workers are employed. In the tourism sector, seasonal labor demand arises during Adana's local festivals and cultural events (Adana Economy Report, 2023, p. 33).

The Adana's sectoral employment dynamics reflect the region's strong structure in agriculture, industry and services. While the demand for skilled labor is increasing, unskilled labor is concentrated in agriculture and construction sectors. More effective inclusion of women and young labor force in the labor market is important to increase the labor potential of the region. Moreover, social protection and formal employment policies need to be expanded to meet seasonal labor demand.

### **1.5. Women Participation to Labor Force and Career Development: A Cross-Gender Comparison**

When women's education levels are compared with men's, an increase in women's schooling rates is observed in general. However, women are underrepresented in vocational

and technical education compared to men. Especially in STEM (science, technology, engineering and mathematics) fields, women's education and professional specialization rates remain low. In industrial and agricultural cities such as Adana, women often gravitate towards traditional occupational groups (e.g. teaching and nursing), limiting occupational diversity (Adana Economy Report, 2023, p. 25).

Women's work experience differs from men's in terms of sectoral distribution and labor market participation. Women are particularly concentrated in the service sector and less in industry and agriculture. Employers are more likely to take into account women employees' need for job security and flexible working opportunities. However, family responsibilities are among the factors limiting women's career advancement (Çukurova Regional Plan, 2014-2023, p. 43).

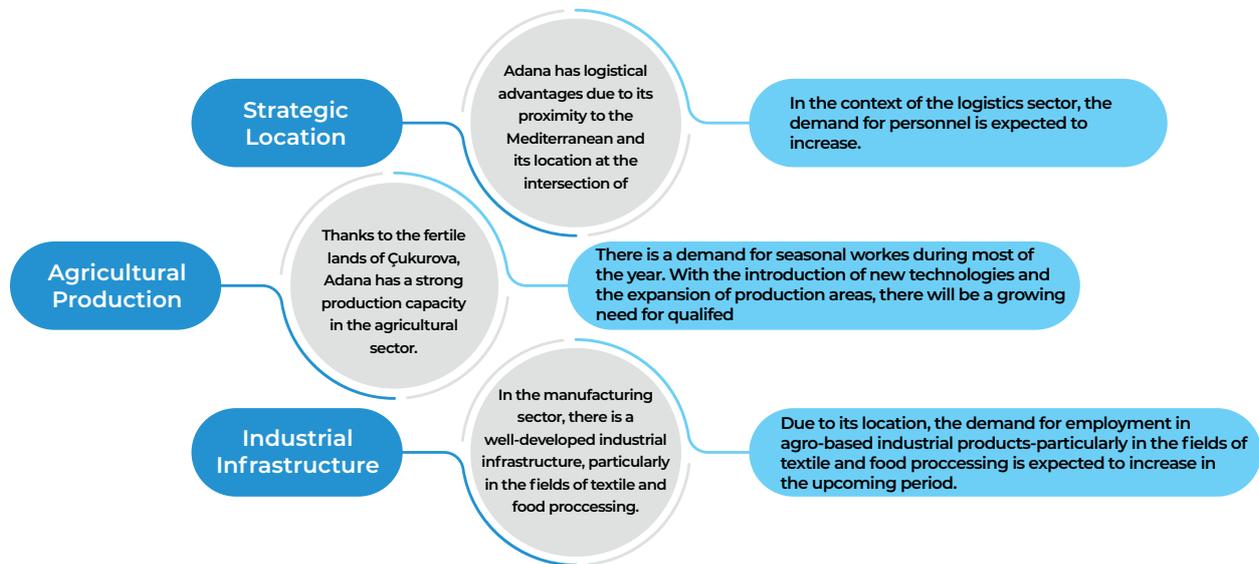
Women's career development is mostly related to their level of education, labor force participation and social support mechanisms. Across Türkiye and in Adana, the representation of women in senior management positions is quite low. Working women are generally concentrated in mid-level positions and have difficulty reaching leadership positions due to the glass ceiling syndrome. In contrast, women's entrepreneurship has increased in recent years with support policies (Labor Market and Youth Employment Report, 2018, p. 35).

Employment and education differences between women and men are particularly pronounced in terms of wage inequality and job insecurity. Women workers receive lower wages than men, which limits women's economic independence. In addition, men are over-represented in STEM fields, leading to male dominance in high-income occupations (Adana Labor Market Report, 2023, p. 18). More vocational training programs, flexible working arrangements and opportunities to access leadership positions should be offered to support women's educational attainment and career development. Scholarship and training programs that encourage women in STEM fields should be expanded. In addition, public awareness campaigns should be conducted to increase women's entrepreneurship and labor force participation rates (Çukurova Regional Plan, 2014-2023, p. 48).

## 1.6. Prominent Findings in Literature Review

As a result of the literature review, the main findings on the labor market in Adana are summarized in Figure-2 and then briefly explained.

**Figure 4.** Findings from the Literature Review of Adana



The Adana's strategic location, agricultural production capacity and industrial infrastructure are important factors shaping the region's economic structure and labor market. Adana's proximity to the Mediterranean Sea and its location at one of the intersection points of highways provide Adana with significant logistical advantages. In line with these advantages, the number of enterprises operating in the logistics sector is expected to increase, and the need for qualified personnel to work in the sector will increase in parallel.

Another important economic strength of the region is agricultural production. Thanks to the fertile soils of Çukurova, Adana has a strong production capacity as one of Türkiye's most important agricultural centers. The need for seasonal workers for the sustainability of agricultural production continues throughout the year, and with the introduction of new technologies and modern production areas, the demand for qualified agricultural personnel is expected to increase further.



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Adana also has a well-developed industrial infrastructure and a strong production structure, especially in the textile and food processing sectors. The region's industry is largely based on agricultural inputs, which increases the need for labor in the textile and food processing sectors. In the coming years, with the growth of the industrial sector, the need for qualified personnel to be employed in these fields will become more evident.

In conclusion, Adana's geographical advantages, agricultural production capacity and industrial strength create important opportunities and requirements in the labor market of the region.

In the first section, existing studies in the literature are evaluated in order to draw a general framework of the labor market in Adana. In order to support the findings in the literature with data from the field, the next section analyzes the secondary data collected in Adana.

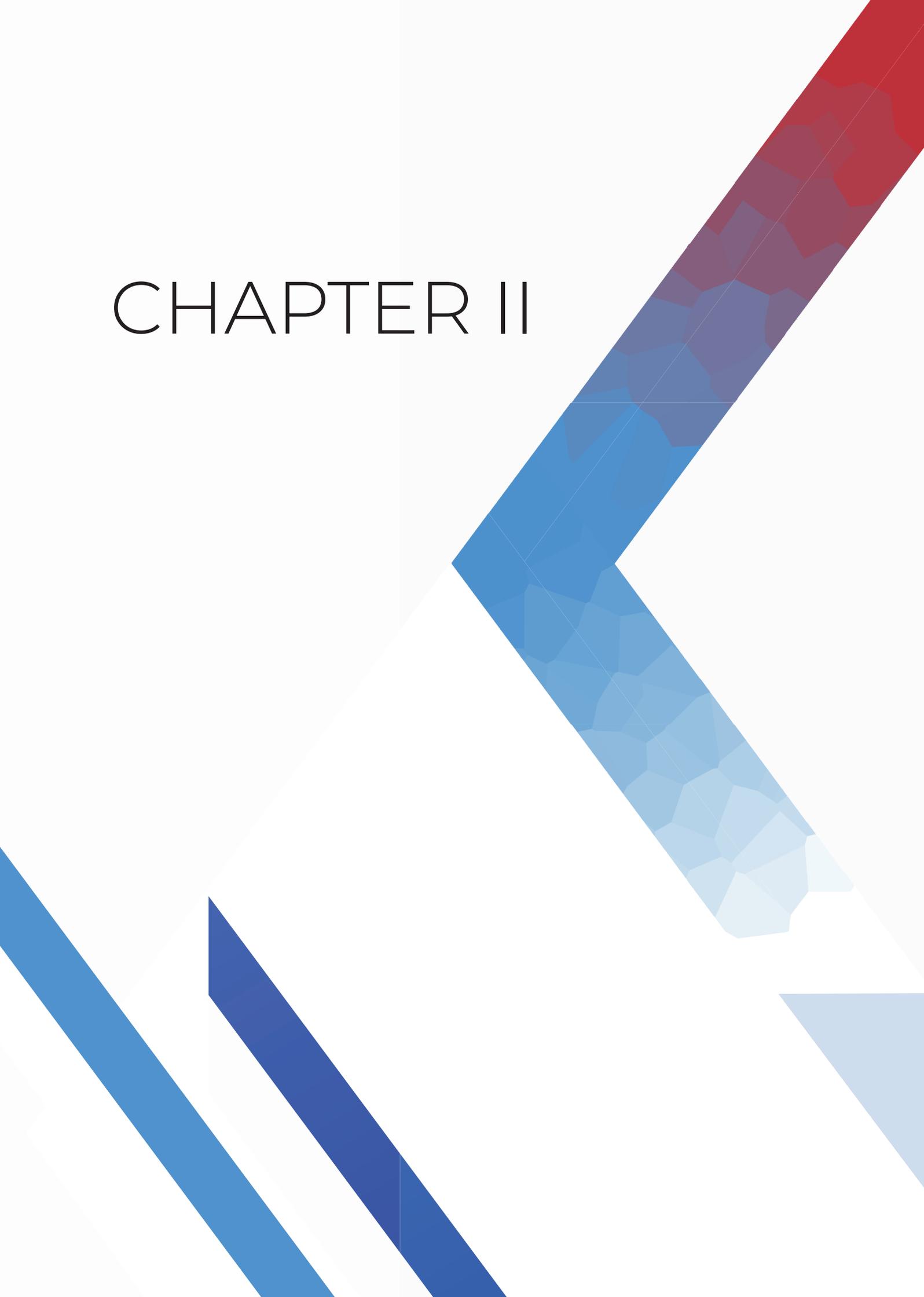
**Secondary Data Analysis and Findings**In this section, Adana's demographic structure, labor market, employment dynamics, social security situation and migration movements are analyzed in detail based on data from TURKSTAT, ISKUR, SSI, Ministry of Labor and Social Security and Presidency of Migration Management.



**With its strong agricultural base and strategic location, Adana is driving labor demand in the textile and food processing sectors. As industrial growth accelerates, the need for qualified workers is becoming increasingly evident. This report examines Adana's labor market transformation through literature review and field-based data analysis, highlighting the region's employment dynamics and future potential.**



# CHAPTER II





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# CHAPTER II

## 2. ANALYSIS OF SECONDARY DATA AND FINDINGS

In this section, data from TURKSTAT, ISKUR, SSI, Ministry of Labor and Social Security and Presidency of Migration Management, Adana's demographic structure, labor market, employment dynamics, social security status and migration movements are analyzed in detail.

### 2.1. Population and Demographic Statistics

#### 2.1.1. TURKSTAT Population Registration System Statistics

Populations of settlements are calculated based on the Address-Based Population Registration System (ADNKS), incorporating individuals residing in institutional facilities, as updated by the Ministry of Interior's General Directorate of Population and Citizenship Affairs. In accordance with the international standards, individuals residing in institutional settings such as barracks, prisons, nursing homes, university student dormitories, etc. are counted within the population of the settlement in which these facilities are located, rather than their place of official residence. In addition, National Address Database records dated 31 December 2023 were used to determine the population by province, district, municipality, village and neighborhood. Within the scope of the foreign national population; people with a valid residence or work permit on the reference date, people with an identity document that replaces a residence permit such as an international protection identity document and a valid address declaration on the reference date, and blue card holders with a valid address declaration on the reference date who have renounced Turkish citizenship with permission are evaluated. Foreigners with a visa or residence permit for a period of less than 90 days for reasons such as courses, tourism, scientific research, etc. and SuTPs are not included in the population.



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**Table 5.** TURKSTAT, Address Based Population Registration System Results, 2023

Population	Years	Türkiye	Adana
<b>Total Population</b>	2022	85,279,553	2,274,106
	2023	85,372,377	2,270,298
<b>Provincial and District Centers</b>	2022	79,613,279	2,274,106
	2023	79,399,292	2,270,298
<b>Annual Population Growth Rate</b>	2021-2022	7,1	4,7
	2022-2023	1,1	-1,7

Table 5 shows the population data for Adana province and Türkiye in 2022 and 2023. The distribution of population living in the provincial and district centers and annual population growth rates are presented comparatively. The data reveals that the decline in Adana's population growth rate is more pronounced compared to Türkiye as a whole.

Compared to the population dynamics in Türkiye as a whole, Adana has exhibited a significant difference in the rate of population growth in recent years. As of 2022-2023, Türkiye's total population continued its upward trend and reached 85.3 million, while Adana's population declined. In particular, Adana's annual population growth rate of -1.7 between 2022 and 2023 reveals that the province has a tendency to emigrate and has experienced significant changes in its demographic structure.

**Table 6.** Provincial/District Center, Town/Village Population and Population Density and Gender, 2023

Population	Gender	Türkiye	Adana
<b>Total Population</b>	<b>Total</b>	85,372,377	2,270,298
	<b>Male</b>	42,734,071	1,135,046
	<b>Female</b>	42,638,306	1,135,252
<b>Provincial and District Centers</b>	<b>Total</b>	79,399,292	2,270,298
	<b>Male</b>	39,664,342	1,135,046
	<b>Female</b>	39,734,950	1,135,252
<b>Population Density</b>		111	163

As of 2023, it shows the total population distribution by gender, the proportion of population living in provincial/district centers and population density in Adana and Türkiye. The data reveals that Adana's population density is above Türkiye's average and that the province has a population structure focused on the urban center (Table 6).

Compared to the general population structure of Türkiye, Adana province exhibits a significant balance in gender distribution. As of 2023, the male population in Adana was recorded as 1,135,046 and the female population as 1,135,252, indicating a balanced gender distribution in the population structure of the province.

**Table 7.** Median Age by Province and Gender, 2023

Years	Gender	Total	Adana
2022	<b>Total</b>	<b>33,5</b>	<b>33</b>
	<b>Male</b>	<b>32,8</b>	32,2
	<b>Female</b>	<b>34,2</b>	33,9
2023	<b>Total</b>	<b>34</b>	<b>33,5</b>
	<b>Male</b>	<b>33,2</b>	32,7
	<b>Female</b>	<b>34,7</b>	34,4



Analyzed by gender, the median age of women in Adana is 34.4 years, while the median age of men is 32.7 years. These values show that the median age of women is higher than that of men when compared to Türkiye as a whole, and this trend is similar across the country. Compared to 2022, the median age has increased both in Türkiye and Adana (Table 7).

In terms of marital status, Adana province has a structure largely in line with the general trends in Türkiye. As of 2023, Adana has a total population of 1,743,190, of which 503,762 people have never been married, 1,045,322 people are married, 97,420 people are divorced and 96,686 people have lost their spouses (Table 8).

Compared to Türkiye as a whole, Adana's marriage rates are close to the national average, but divorce and widowhood rates are higher, especially among women. The distribution of marital status in Adana shows that urban and traditional lifestyles coexist and that the rates of marriage, divorce and widowhood are similar to those in Türkiye.



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**Table 8.** Population by Marital Status and Gender, 2023

	Gender	Total	Adana
Total	<b>Total</b>	<b>67,060,744</b>	<b>1,743,190</b>
	<b>Male</b>	<b>33,339,609</b>	<b>864,808</b>
	<b>Female</b>	<b>33,721,135</b>	<b>878,382</b>
Never Married	<b>Total</b>	<b>19,231,798</b>	<b>503,762</b>
	<b>Male</b>	<b>10,911,913</b>	286,689
	<b>Female</b>	<b>8,319,885</b>	217,073
Married	<b>Total</b>	<b>40,876,455</b>	<b>1,045,322</b>
	<b>Male</b>	<b>20,460,478</b>	521,401
	<b>Female</b>	<b>20,415,977</b>	523,921
Divorced	<b>Total</b>	<b>3,205,212</b>	<b>97,420</b>
	<b>Male</b>	<b>1,415,476</b>	42,815
	<b>Female</b>	<b>1,789,736</b>	54,605
Widowed	<b>Total</b>	<b>3,747,279</b>	<b>96,686</b>
	<b>Male</b>	<b>551,742</b>	13,903
	<b>Female</b>	<b>3,195,537</b>	82,783

In terms of foreign population, Adana exhibits a similar structure to the trends in Türkiye in general. While 15,320 foreigners resided in Adana in 2022, this number decreased to 12,696 in 2023. A similar decline is observed across Türkiye, with the foreign population decreasing from 1,823,836 to 1,570,543 (Table 9). In terms of gender, the male and female foreign population in Adana in 2023 is projected to be 6,196 and 6,500, respectively.

**Table 9.** Foreign Population

Years	Gender	Total	Adana
2022	<b>Total</b>	<b>1,823,836</b>	<b>15,320</b>
	<b>Male</b>	<b>902,124</b>	7,710
	<b>Female</b>	<b>921,712</b>	7,610
2023	<b>Total</b>	<b>1,570,543</b>	<b>12,696</b>
	<b>Male</b>	<b>762,672</b>	6,196
	<b>Female</b>	<b>807,871</b>	6,500

Table 10 shows the change in average household size for Türkiye and Adana province between 2008 and 2023. The data show that household size has decreased over the years, which may be related to fertility rates, urbanization and individualized lifestyles.

Adana province exhibits a similar downward trend in terms of household size to Türkiye in general. In 2008, Türkiye had an average household size of 4 people while in Adana this value was recorded as 4.2. However, a steady decline in household size has been observed in both Türkiye and Adana over the years and as of 2023, it has declined to 3.1 in Türkiye and 3.3 in Adana.

**Table 10.** Average Household Size, 2008-2023

Years	Türkiye	Adana
2008	4	4,2
2009	4	4,2
2010	3,8	4,1
2011	3,8	4,1
2012	3,7	4
2013	3,6	3,9
2014	3,6	3,9
2015	3,5	3,8
2016	3,5	3,8
2017	3,4	3,7
2018	3,4	3,7
2019	3,4	3,6
2020	3,3	3,6
2021	3,2	3,5
2022	3,2	3,4
2023	3,1	3,3



Adana has a slightly higher age dependency ratio compared to Türkiye's average. As of 2023, Adana's total age dependency ratio is 48.8%, while this rate is calculated as 46.3% in Türkiye. This rate refers to the sum of the working age population (15-64 years), children in the 0-14 age group and individuals over 65 years of age (Table 11).

**Table 11.** Age Dependency Ratio, 2007-2023

Age	Total	Adana
<b>Total</b>	<b>85,372,377</b>	<b>2,270,298</b>
<b>0-14</b>	18,311,633	527,108
<b>15-64</b>	58,337,938	1,525,735
<b>65 +</b>	8,722,806	217,455
<b>Total Age Dependency Ratio (%)</b>	46,3	48,8
<b>Child Dependency Ratio (%)</b>	31,4	34,5
<b>Elderly Dependency Ratio (%)</b>	15	14,3

An analysis of the sub-divisions shows that Adana's child dependency ratio of 34.5% is higher than the national average of 31.4%. This indicates that Adana has a higher proportion of young population compared to the country as a whole and that the province has a relatively younger demographic structure. On the other hand, the elderly dependency ratio is 14.3% in Adana, it is calculated as 15% in Türkiye. This shows that Adana has a lower proportion of elderly population compared to the national average. These data show that Adana still has a young population structure, but the increase in the age dependency ratio in the long term should be taken into account in terms of sustainable development.

Adana follows a different course from Türkiye in terms of annual population growth rate. When the data between 2007 and 2023 are analyzed, it is seen that Adana's population growth rate exhibits a fluctuating trend and has experienced a significant decline in recent years. Especially in the period 2022-2023, Adana's annual population growth rate is realized as -1.7, which reveals that the province is experiencing population loss. In Türkiye as a whole, this rate remained at 1.1 and although population growth slowed down, it still remained positive (Table 12).

In previous years, Adana's population growth rate was generally close to Türkiye's average, but declined to a low of 1.6% in 2017–2018 and stayed at 2.1% in 2020–2021.

On the other hand, in terms of population density, Adana's population density is quite high compared to Türkiye as a whole. As of 2023, Türkiye's population density is 111 people/km<sup>2</sup>, while this value is calculated as 169 people/km<sup>2</sup> in Adana. This shows that the province has a more compact settlement structure and urbanization is more intense.



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**Table 12.** Annual Population Growth Rate and Population Density by Years, 2007-2023

Population	Year	Türkiye Overall	Adana
Annual Population Growth Rate (%)	2007-2008	<b>13,1</b>	9,8
	2008-2009	<b>14,5</b>	17,6
	2009-2010	<b>15,9</b>	11,1
	2010-2011	<b>13,5</b>	11,2
	2011-2012	<b>12</b>	7,9
	2012-2013	<b>13,7</b>	11,1
	2013-2014	<b>13,3</b>	7,6
	2014-2015	<b>13,4</b>	8,1
	2015-2016	<b>13,5</b>	8,4
	2016-2017	<b>12,4</b>	6,7
	2017-2018	<b>14,7</b>	1,6
	2018-2019	<b>13,9</b>	8
	2019-2020	<b>5,5</b>	9,2
	2020-2021	<b>12,7</b>	2,1
	2021-2022	<b>7,1</b>	4,7
2022-2023	<b>1,1</b>	-1,7	
Population Density(R)	2007	<b>92</b>	149
	2008	<b>93</b>	150
	2009	<b>94</b>	153
	2010	<b>96</b>	155
	2011	<b>97</b>	157
	2012	<b>98</b>	158
	2013	<b>100</b>	160
	2014	<b>101</b>	161
	2015	<b>102</b>	162
	2016	<b>104</b>	164
	2017	<b>105</b>	165
	2018	<b>107</b>	165
	2019	<b>108</b>	166
	2020	<b>109</b>	168
	2021	<b>110</b>	168
	2022	<b>111</b>	169
2023	<b>111</b>	169	

## 2.2. Labor Force and Employment Statistics

### 2.2.1. TURKSTAT Unemployment, Employment, Labor Force Participation Rates

In 2022 and 2023, unemployment rates are higher in Adana compared to Türkiye as a whole. In 2022, the unemployment rate in Türkiye was 10.4%, while in Adana it was 15.3%. In 2023, while the unemployment rate decreased to 9.4% in Türkiye, it remained at 14% in Adana (Table 13).

**Table 13.** Unemployment Rate at Provincial Level

Year	Confidence Interval	Threshold Values	Türkiye	Adana
2022	Ratio		10,4	15,3
	95% Confidence Interval	Lower Limit	10,2	13,6
		Upper Limit	10,6	17
2023	Ratio		9,4	14
	95% Confidence Interval	Lower Limit	9,2	12,7
		Upper Limit	9,6	15,4

According to the table, when the 95% confidence interval is evaluated, the unemployment rate in Adana ranges between 13.6% and 17% in 2022 and between 12.7% and 15.4% in 2023. Although there has been some improvement in the unemployment rate, Adana is still more vulnerable to unemployment than the Turkish average.

**Table 14.** Employment Rate at Provincial Level

Year	Confidence Interval	Threshold Values	Türkiye	Adana
2022	Ratio		47,5	44,1
	95% Confidence Interval	Lower Limit	47,3	42,3
		Upper Limit	47,8	46
2023	Ratio		48,3	43,7
	95% Confidence Interval	Lower Limit	48	42,1
		Upper Limit	48,6	45,4

It is observed that employment rates in Adana remained below Türkiye's average and experienced a slight decline in 2023 (Table 14). This reflects the structural problems in the regional labor market and the effects of economic dynamics. In 2022, while the employment rate in Türkiye was 47.5%, this rate remained at 44.1% in Adana.

By 2023, the employment rate in Türkiye will rise to 48.3%, while in Adana it will decline slightly to 43.7%. This situation reveals that labor market participation rates in Adana are lower than in Türkiye and employment opportunities remain limited.

**Table 15.** Labor Force Participation Rate at Provincial Level

Year	Confidence Interval	Threshold Values	Türkiye	Adana
2022	Ratio		53,1	52,1
	95% Confidence Interval	Lower Limit	52,8	50,5
		Upper Limit	53,3	53,7
2023	Ratio		53,3	50,9
	95% Confidence Interval	Lower Limit	53,1	49,4
		Upper Limit	53,5	52,4

Adana is slightly lower than Türkiye in terms of labor force participation rate. In 2022, the labor force participation rate in Türkiye was 53.1%, while in Adana it was 52.1%. By 2023, the labor force participation rate in Türkiye will rise to 53.3%, while in Adana it will fall to 50.9%. The decline in Adana's labor force participation rate indicates that the province faces some structural challenges in the labor market (Table 16).

## 2.2.2. ISKUR Labor Market Statistics (Open Job Records, Unemployment Statistics, Labor Force Surveys)

The province of Adana exhibits remarkable differences in terms of vacancies and job placements compared to Türkiye as a whole. As of 2023, the total number of vacancies in Adana was 67,636, of which 67,599 were in the private sector and only 37 in the public sector. In Türkiye, the total number of vacancies is 2,677,006, the majority of which is provided by the private sector. The fact that almost all of the vacancies in Adana are in the private sector shows that public sector recruitment is quite limited (Table 16).

An analysis of job placement data reveals that while 41,425 people were employed in Adana, 41,381 of these people were employed in the private sector and only 44 were employed in the public sector. This indicates that employment in Adana is predominantly driven by the private sector. In terms of gender distribution, male employment significantly exceeds female employment with a total of 32,619 employees of whom only 8,806 are women. This suggests that women may face some constraints in their participation in the labor market and access to employment opportunities. While a similar trend is observed across Türkiye, it is noteworthy that female employment is relatively lower in Adana.

**Table 16.** Open Vacancy Announcement and Job Placements

Job Status	Open Vacancy Announcement	Gender	Adana	Türkiye
Open Vacancy Announcement	<b>Public</b>		37	30,190
	<b>Private</b>		67,599	2,646,816
	<b>Total</b>		67,636	2,677,006
Job Placement	<b>Public</b>	<b>Male</b>	41	11,581
		<b>Female</b>	3	4,935
		<b>Total</b>	44	16,516
	<b>Private</b>	<b>Male</b>	32,578	761,307
		<b>Female</b>	8,803	459,203
		<b>Total</b>	41,381	1,220,510
	<b>Total</b>	<b>Male</b>	32,619	772,888
		<b>Female</b>	8,806	464,138
		<b>Total</b>	41,425	1,237,026



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In Adana province, 41,425 people were placed in jobs through ISKUR, of which 32,619 were male and 8,806 were female. When analyzed by age groups, the number of people employed in the 15-24 age group is 11,076 and this age group constitutes the highest number of people employed by ISKUR. However, there is a significant decline in the number of people employed with ISKUR with increasing age. The number of people employed in the 25-29 age group is 8,178, 5,479 in the 30-34 age group and 4,719 in the 35-39 age group. In the age group of 50 and above, the number of people employed gradually decreases (Table 17).

In terms of women, the number of women employed is lower than men in all age groups. The fact that the job placement rates of women aged 45 and above are quite low shows that the difficulties faced by women in the labor market increase with age.





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**Table 17.** Placements by Age Groups

Age	Gender	Adana	Total
15 - 24	Male	8,051	268,499
	Female	3,025	189,225
	<b>Total</b>	11,076	<b>457,724</b>
25 - 29	Male	6,444	149,511
	Female	1,734	81,088
	<b>Total</b>	8,178	<b>230,599</b>
30 - 34	Male	4,391	93,457
	Female	1,088	49,210
	<b>Total</b>	5,479	<b>142,667</b>
35 - 39	Male	3,677	74,114
	Female	1,042	47,472
	<b>Total</b>	4,719	<b>121,586</b>
40 - 44	Male	3,596	69,395
	Female	1,003	45,752
	<b>Total</b>	4,599	<b>115,147</b>
45 - 49	Male	3,195	59,465
	Female	587	30,307
	<b>Total</b>	3,782	<b>89,772</b>
50 - 54	Male	2,023	36,786
	Female	228	14,149
	<b>Total</b>	2,251	<b>50,935</b>
55 - 59	Male	920	14,998
	Female	71	5,047
	<b>Total</b>	991	<b>20,045</b>
60 - 64	Male	270	5,174
	Female	22	1,435
	<b>Total</b>	292	<b>6,609</b>
65+	Male	52	1,489
	Female	6	453
	<b>Total</b>	58	<b>1,942</b>
Total	Male	32,619	772,888
	Female	8,806	464,138
	<b>Total</b>	41,425	<b>1,237,026</b>



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Adana province exhibits a similar structure with the general trends in Türkiye in terms of the distribution of job placements by education level. The total job placement rate of illiterate and literate individuals is quite low. In Adana, only 222 illiterate and 1,617 literate individuals were employed through ISKUR.

Similarly, employment of these groups is limited throughout Türkiye. Primary school graduates are the largest employed group, with a total of 17,550 people placed in jobs. This shows that individuals with low levels of education are the group with the highest share in the labor market (Table 18).

**Table 18.** Distribution of Job Placements by Educational Background and Province

Education Status	Gender	Adana	Türkiye
Illiterate	Male	183	667
	Female	39	174
	Total	222	841
Literate People (no formal education completed)	Male	1,323	12,387
	Female	294	6,002
	Total	1,617	18,389
Primary Education	Male	14,986	307,813
	Female	2,564	147,342
	Total	17,550	455,155
Secondary Education	Male	11,684	326,857
	Female	3,210	183,932
	Total	14,894	510,789
Associate Degree	Male	2,347	62,086
	Female	1,306	65,746
	Total	3,653	127,832
Bachelor's Degree	Male	2,007	60,938
	Female	1,338	58,836
	Total	3,345	119,774
Master's Degree	Male	87	2,046
	Female	54	2,016
	Total	141	4,062
PhD	Male	2	94
	Female	1	90
	Total	3	184
Total	Male	32,619	772,888
	Female	8,806	464,138
	Total	41,425	1,237,026

Secondary education graduates constitute the second largest group with a total of 14,894 job placements. This shows that high school graduates have a significant share in the labor market. The total employment of associate's degree graduates is 3,653, and the employment of women in this group is higher than that of men. A similar trend is observed across Türkiye, with more women employed at the associate's degree level. The total number of job placements for bachelor's degree graduates remained relatively low at 3,345. As the level of education increases, the number of ISKUR job placements decreases. It is particularly striking that only 141 individuals with a master's degree and just 3 individuals with a doctoral degree were placed in jobs.

**Table 19.** Distribution of Unemployed Registered with ISKUR by Occupational Groups

Occupational Groups	Adana	Türkiye
Office Services Employees	6,065	<b>249,265</b>
Service and Sales Workers	11,920	<b>431,768</b>
Unskilled Occupations	27,419	<b>957,763</b>
Skilled Agricultural, Forestry and Aquaculture Workers	657	<b>22,411</b>
Professional Professionals	4,085	<b>167,044</b>
Artisans and Related Trades	5,404	<b>205,836</b>
Armed Forces Related Occupations	24	<b>709</b>
Technicians, Technicians and Assistant Professionals	4,364	<b>165,596</b>
Plant and Machine Operators and Assemblers	4,042	<b>196,233</b>
Managers	500	<b>23,826</b>
<b>Total</b>	<b>64,480</b>	<b>2,420,451</b>

The occupational group with the highest number of registered unemployed in Adana is in the category of **“Unskilled Occupations”** with 27,419 people. This shows that the low-skilled labor force has difficulty in being employed and the demand for unskilled labor force is high. The same trend is observed across Türkiye, and unemployment in unskilled occupations stands out as one of the most common problems. In Adana, 11,920 people in the service and sales personnel group and 6,065 people in the clerical services category were recorded as unemployed (Table 19).

While 4,042 people are unemployed in the **“Plant and Machinery Operators and Assemblers”** group in the industrial sector, 5,404 people are unemployed in the **“Craftsmen and Related Workers”** category. This situation shows that unemployment problems persist in the industrial and production sectors and that employment opportunities in these areas have not expanded sufficiently. In terms of skilled labor, 4,085 individuals from the **“Professionals”** group and 4,364 individuals from the **“Technicians and Associate Professionals”** category were recorded as unemployed. These figures point to the difficulties experienced by individuals with education and professional skills in finding a job. In particular, high unemployment rates in areas requiring technical skills point to a mismatch between the labor force and sector needs.

Adana province exhibits a similar structure to the general trends in Türkiye in terms of the distribution of registered unemployed by age groups. While there are 64,480 registered unemployed, 31,110 of them are male and 33,370 are female. When analyzed by age groups, the number of unemployed in the 25-29 age group is the highest with 12,965 people. This shows that the 25-29 age group has the most difficulty in entering the labor market. The fact that university graduates or individuals with vocational training are looking for a job in this age range reveals that the transition to employment after graduation is not easy. There are a total of 12,230 unemployed in the 15-24 age group. The unemployment rate in this age group is also quite high and shows that youth unemployment stands out as an important problem (Table 20).

The number of unemployed gradually decreases with increasing age. There are 10,617 unemployed in the 30-34 age group and 9,249 in the 35-39 age group. This decline indicates that middle-age groups are more adapted to the labor market and are more stable in terms of employment. However, after the age of 40, the number of unemployed continues to decline, but at certain levels. Although the unemployment rates of individuals aged 50 and above seem to be lower, this may be related to the withdrawal from the labor force and retirement processes. In the 50-54 age group, 3,541 people, in the 55-59 age group 1,584 people and in the 60-64 age group 551 people were recorded as unemployed.

The fact that the number of unemployed in the 65 and over age group is quite low indicates that individuals have largely withdrawn from the active labor force. In terms of gender, the number of unemployed women is higher than men in almost every age group. Especially in the 25-39 age group, female unemployment is significantly higher. This situation reveals the obstacles women face in entering the labor market as well as the difficulties they face in sustaining employment (Table 20).

In Adana province, graduates of primary and secondary education levels constitute the largest group among the unemployed with a total of 45,861 people. This situation reveals that individuals with low and middle education levels have more difficulty in finding a job. A similar trend is observed in Türkiye as a whole and it is understood that unemployment is most prevalent at these education levels.

“ The occupational group with the highest number of registered unemployed in Adana is in the category of ‘Unskilled Occupations’ with 27,419 people. This situation shows that low-skilled labor force has difficulty in being employed and the demand for unskilled labor force is high. The same trend is observed throughout Türkiye and unemployment in unskilled occupations stands out as one of the most common problems. In Adana, 11,920 people were recorded as unemployed in the service and sales personnel group and 6,065 people were recorded as unemployed in the clerical services category. ”



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**Table 20.** Unemployed Registered with ISKUR by Age Groups and Gender

Age	Gender	Adana	Türkiye
15 - 24	Male	6,132	<b>257,307</b>
	Female	6,098	<b>228,122</b>
	<b>Total</b>	<b>12,230</b>	<b>485,429</b>
25 - 29	Male	6,230	<b>245,394</b>
	Female	6,735	<b>251,120</b>
	<b>Total</b>	<b>12,965</b>	<b>496,514</b>
30 - 34	Male	4,955	<b>192,957</b>
	Female	5,662	<b>207,888</b>
	<b>Total</b>	<b>10,617</b>	<b>400,845</b>
35 - 39	Male	4,218	<b>163,319</b>
	Female	5,031	<b>186,245</b>
	<b>Total</b>	<b>9,249</b>	<b>349,564</b>
40 - 44	Male	3,679	<b>136,011</b>
	Female	4,220	<b>151,300</b>
	<b>Total</b>	<b>7,899</b>	<b>287,311</b>
45 - 49	Male	2,686	<b>92,109</b>
	Female	2,991	<b>101,076</b>
	<b>Total</b>	<b>5,677</b>	<b>193,185</b>
50 - 54	Male	1,832	<b>63,796</b>
	Female	1,709	<b>60,281</b>
	<b>Total</b>	<b>3,541</b>	<b>124,077</b>
55 - 59	Male	912	<b>29,772</b>
	Female	672	<b>25,258</b>
	<b>Total</b>	<b>1,584</b>	<b>55,030</b>
60 - 64	Male	350	<b>13,047</b>
	Female	201	<b>8,059</b>
	<b>Total</b>	<b>551</b>	<b>21,106</b>
65+	Male	116	<b>4,460</b>
	Female	51	<b>2,930</b>
	<b>Total</b>	<b>167</b>	<b>7,390</b>
<b>Total</b>	Male	<b>31,110</b>	<b>1,198,172</b>
	Female	<b>33,370</b>	<b>1,222,279</b>
	<b>Total</b>	<b>64,480</b>	<b>2,420,451</b>



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In Adana, 35% of the unemployed registered with ISKUR are primary school graduates and 36% are secondary school graduates. This shows that individuals with lower levels of education struggle more in the labor market (Table 21).

Associate's and bachelor's degree graduates have a significant share among the unemployed with a total of 15,791 people. In particular, unemployment rates of women with associate's degrees (5,657 people) and women with bachelor's degrees (4,330 people) are higher than those of men.

**Table 21.** Distribution of Unemployed Registered with ISKUR by Educational Background

Education Status	Gender	Adana	Total
Illiterate	Male	312	7,971
	Female	355	15,619
	Total	667	23,590
Literate People (no formal education completed)	Male	892	23,732
	Female	974	33,297
	Total	1,866	57,029
Primary Education	Male	12,246	465,555
	Female	10,327	388,427
	Total	22,573	853,982
Secondary Education	Male	11,731	470,158
	Female	11,557	406,134
	Total	23,288	876,292
Associate Degree	Male	2,873	104,149
	Female	5,657	191,638
	Total	8,530	295,787
Bachelor's Degree	Male	2,931	120,459
	Female	4,330	178,882
	Total	7,261	299,341
Master's Degree	Male	122	5,825
	Female	165	7,957
	Total	287	13,782
PhD	Male	3	323
	Female	5	325
	Total	8	648
Total	Male	31,110	1,198,172
	Female	33,370	1,222,279
	Total	64,480	2,420,451



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**Table 22.** Job Placements for People with Disabilities, Former Convicts and People Injured in the War on Terror

Disadvantaged Groups	Job Placement	Gender	Adana	Türkiye
People with disabilities	Public	Male	5	451
		Female	3	104
		Total	8	555
	Private Sector	Male	493	27,501
		Female	84	7,121
		Total	577	34,622
	Total	Male	498	27,952
		Female	87	7,225
		Total	585	35,177
Ex-convict / Injured in the War on Terror	Public	Male	1	165
		Female	0	3
		Total	1	168

A total of 585 disabled people were employed in Adana province, 498 of them were male and 87 of them were female. In Türkiye, a total of 35,177 people with disabilities were employed. When the data on the employment of people with disabilities are analyzed, it is seen that the private sector employs more people with disabilities than the public sector. While the number of people with disabilities employed in the public sector in Adana is only 8, this number reaches 577 in the private sector. When analyzed by gender, a significant disparity is observed in the employment of people with disabilities, with female employment notably lower than that of males. In the private sector in Adana, only 84 women with disabilities are employed, compared to 493 men. In the public sector, this ratio is very limited as 3 women and 5 men. A similar trend is observed across Türkiye, where the employment rate of men with disabilities is significantly higher than that of women (Table 22).



Adana province exhibits a similar structure with Türkiye in terms of numerical data on employment of people with disabilities. The total number of workplaces obliged to employ people with disabilities is 497 in Adana, of which 23 belong to the public sector and 474 to the private sector.

**Table 23.** Statistics on People with Disabilities

People with Disabled	Job Placement	Türkiye	Adana
Number of Workplaces Obligated to Employ Disabled People	<b>Public</b>	23	1,433
	<b>Private Sector</b>	474	21,501
	<b>Total</b>	497	22,934
Number of Disabled People Currently Working	<b>Public</b>	339	22,449
	<b>Private Sector</b>	2,313	121,729
	<b>Total</b>	2,652	144,178
Number of Open Quotas	<b>Public</b>	41	3,532
	<b>Private Sector</b>	513	21,370
	<b>Total</b>	554	24,902
Number of Disabled People Working in Excess of Quota	<b>Public</b>	26	3,453
	<b>Private Sector</b>	227	10,407
	<b>Total</b>	253	13,860

An analysis of the workplaces where people with disabilities are currently employed shows that a total of 2,652 people with disabilities are employed in Adana. Of these, 339 are employed in the public sector and 2,313 in the private sector. A similar trend is observed in Türkiye in general, and it is noteworthy that employment of disabled people is mostly provided by the private sector. The total number of **“open vacancies”** allocated for the employment of people with disabilities but not filled is 554 in Adana, 41 of which belong to the public sector and 513 to the private sector. In Türkiye, the total number of open vacancies is calculated as 24,902. These figures show that employers have not fully filled the quotas set for the employment of people with disabilities and that a significant number of people with disabilities can still be integrated into the labor market (Table 23).

However, there are also disabled people employed in some workplaces over quota. In Adana, 253 people are employed in this context, 26 of them in the public sector and 227 in the private sector. In Türkiye, a total of 13,860 people are employed over quota. This shows that some employers encourage the employment of disabled people beyond the legal obligation and support their integration into the labor market.



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As of 2023, a total of 8,806 women were employed in Adana, with only 3 employed in the public sector and 8,803 in the private sector. Within the framework of active labor market policies, on-the-job training programs play a crucial role in promoting women's employment. While only 4 women benefited from vocational training programs in Adana, 861 women benefited from on-the-job training programs (Table 24).

**Table 24.** Services Provided by ISKUR for Women

Employment Movements	Services	Adana	Türkiye
Job Placement	<b>Public</b>	3	<b>4,935</b>
	<b>Private Sector</b>	8,803	<b>459,203</b>
	<b>Total</b>	8,806	<b>464,138</b>
Active Labor Market Policies	<b>Vocational Training</b>	4	<b>607</b>
	<b>On-the-Job Training</b>	861	<b>26,761</b>
	<b>Total</b>	865	<b>27,368</b>
Individual Interview	<b>Number of Interviews</b>	27,184	<b>1,132,034</b>

**Table 25.** ISKUR's Services for Social Assistance Recipients

Employment Movements	Gender / Training	Adana	Türkiye
Job Placement	<b>Male</b>	699	<b>10,923</b>
	<b>Female</b>	213	<b>5,902</b>
	<b>Total</b>	912	<b>16,825</b>
Active Labor Market Programs	<b>Vocational Training</b>	8	<b>181</b>
	<b>On-the-Job Training</b>	103	<b>2,156</b>
	<b>Total</b>	111	<b>2,337</b>

In Adana province, a total of 912 people receiving social assistance were placed in employment, of which 699 were male and 213 were female. In Türkiye, this number was recorded as 16,825 people in total. This data shows that men are more likely to be employed than women in the integration of individuals receiving social assistance into the labor market. A similar situation is observed in Adana, where women benefiting from social assistance are less likely to be directed to employment (Table 25).

Vocational training and on-the-job training programs are very limited within the scope of active labor market programs implemented to bring individuals receiving social assistance into the labor force. In Adana, only 8 people benefited from vocational training programs, while the number of people participating in on-the-job training programs was 103.

The data reveal that the number of applications for unemployment benefits in Adana is high, but not all applicants benefit from this support. In terms of unemployment insurance activities, Adana exhibits a similar structure to the trends in Türkiye. As of 2023, a total of 38,142 people applied for unemployment benefits in Adana, compared to 1,614,184 in Türkiye. These data show that Adana has a structure parallel to the general trends in Türkiye in terms of unemployment benefit applications (Table 26).

**Table 26.** Unemployment Insurance Activities

Activities	Appropriation Status	Adana	Türkiye
Application for Unemployment Benefits		38,142	<b>1,614,184</b>
Number of Beneficiaries	<b>Applications Rejected / Not Eligible</b>	4,947	<b>247,973</b>
	<b>Payments Concluded</b>	4,241	<b>184,034</b>
	<b>Ongoing Payments</b>	7,869	<b>302,839</b>

In total, 17,057 people were entitled to unemployment benefits, of which 10,395 were male and 6,662 were female. When analyzed by age groups, the highest number of people entitled to unemployment benefits is concentrated in the 25-34 age group. A total of 3,205 people in the 25-29 age group and 3,478 people in the 30-34 age group were entitled to unemployment benefits. In the 35-39 age group, 3,280 people receive unemployment benefits. These data show that young and middle-aged individuals are more likely to experience job loss in the labor market. The high rate of unemployment benefit claims for individuals aged 25-39 indicates that this age group constitutes the most dynamic segment of the active labor force and is one of the groups with the highest employment mobility. There is a notable decrease in the number of individuals claiming unemployment benefits as age increases. For those aged 50 and above, the rate of unemployment benefit claims remains particularly low.

Analyzed by gender, it is noteworthy that women are less likely to receive unemployment benefits than men. This difference becomes more pronounced especially for women aged 30 and above. A similar trend is observed across Türkiye, with women benefiting less from the unemployment insurance mechanism compared to men (Table 27).

In terms of educational attainment, primary and secondary education graduates constitute the largest group among those entitled to unemployment benefits with a total of 11,996 people. Primary education graduates and secondary education graduates are the groups with the highest number of unemployment benefit claimants with a total of 6,395 and 5,601 respectively. A similar trend is observed across Türkiye, with individuals with low and secondary education making up the majority of those claiming unemployment benefits. The share of associate's and bachelor's degree graduates claiming unemployment benefits is also noteworthy. In Adana, 1,737 associate degree graduates and 2,434 bachelor's degree graduates were entitled to unemployment benefits. These rates are similar across Türkiye. The unemployment benefit entitlement rate of bachelor's degree graduates is higher than that of associate's degree graduates, indicating that higher education graduates are more likely to apply for unemployment insurance when they experience job loss (Table 27).

Adana has a very limited participation in active labor market programs. While a total of 2,116 people benefited from these programs, this number is 50,471 in Türkiye (Table 28). Within the scope of disability courses, only 10 people received training in Adana, while this number is 134 in Türkiye. This indicates that access to employability-enhancing courses for people with disabilities is considerably limited. Participation in such courses is particularly scarce among individuals who are illiterate or have only completed primary education.





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**Table 27.** Unemployment Allowance Claimants by Age Groups

Age Ranges	Gender	Adana	Türkiye
15-24	Male	685	32,249
	Female	552	22,647
	Total	1,237	54,896
25-29	Male	1,795	79,901
	Female	1,410	62,404
	Total	3,205	142,305
30-34	Male	2,158	91,156
	Female	1,320	56,978
	Total	3,478	148,134
35-39	Male	2,072	89,522
	Female	1,208	50,113
	Total	3,280	139,635
40-44	Male	1,943	78,183
	Female	1,031	47,259
	Total	2,974	125,442
45-49	Male	1,037	37,126
	Female	633	32,460
	Total	1,670	69,586
50-54	Male	450	17,185
	Female	345	18,480
	Total	795	35,665
55-59	Male	205	7,371
	Female	130	7,937
	Total	335	15,308
60-64	Male	44	1,489
	Female	26	1,617
	Total	70	3,106
65+	Male	6	370
	Female	7	399
	Total	13	769
Total	Male	10,395	434,552
	Female	6,662	300,294
	Total	17,057	734,846



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**Table 28.** Unemployment Allowance Beneficiaries According to Educational Background by Provinces

Education Status	Gender	Adana	Türkiye
Illiterate	Male	124	3,390
	Female	103	3,476
	Total	227	6,866
Literate People (no formal education completed)	Male	269	9,005
	Female	245	7,417
	Total	514	16,422
Primary Education	Male	4,466	183,297
	Female	1,929	99,356
	Total	6,395	282,653
Secondary Education	Male	3,562	147,556
	Female	2,039	83,452
	Total	5,601	231,008
Associate Degree	Male	799	33,978
	Female	938	43,329
	Total	1,737	77,307
Bachelor's Degree	Male	1,103	53,554
	Female	1,331	59,102
	Total	2,434	112,656
Master's Degree	Male	70	3,629
	Female	77	4,043
	Total	147	7,672
PhD	Male	2	143
	Female	0	119
	Total	2	262
<b>Total</b>	Male	10,395	434,552
	Female	6,662	300,294
	Total	17,057	734,846

Within the scope of on-the-job training programs (IEP), a total of 2,106 people participated in the program in Adana, of which 1,245 were male and 861 were female. When participation in the programs is analyzed according to educational status, the highest participation was made by secondary education graduates and primary education graduates. The participation of bachelor's and associate degree graduates in on-the-job training programs is quite low.



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**Table 29.** Active Labor Market Programs by Education and Program Types

Provinces\Status of Education	Disability Course			Voc. Training			On-the-Job Training Program (IEP)			General Total		
	F	M	T	F	M	T	F	M	T	F	M	T
<b>Türkiye</b>	<b>84</b>	<b>50</b>	<b>134</b>	<b>963</b>	<b>557</b>	<b>1,520</b>	<b>22,056</b>	<b>26,761</b>	<b>48,817</b>	<b>23,103</b>	<b>27,368</b>	<b>50,471</b>
Illiterate	3	0	3	0	0	0	33	17	50	36	17	53
Literate People (no formal education completed)	1	6	7	1	6	7	636	796	1,432	638	808	1,446
Primary Education	26	13	39	120	114	234	6,237	8,943	15,180	6,383	9,070	15,453
Secondary Education (High School and Equivalent)	49	27	76	171	149	320	10,526	10,356	20,882	10,746	10,532	21,278
Associate Degree	3	2	5	322	106	428	2,419	3,908	6,327	2,744	4,016	6,760
Bachelor's Degree	2	2	4	337	176	513	2,161	2,683	4,844	2,500	2,861	5,361
Master's Degree	0	0	0	12	6	18	43	58	101	55	64	119
PhD	0	0	0	0	0	0	1	0	1	1	0	1
<b>Adana</b>	<b>6</b>	<b>4</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,245</b>	<b>861</b>	<b>2,106</b>	<b>1,251</b>	<b>865</b>	<b>2,116</b>
Illiterate	0	0	0	0	0	0	14	1	15	14	1	15
Literate People (no formal education completed)	0	0	0	0	0	0	122	42	164	122	42	164
Primary Education	1	0	1	0	0	0	325	214	539	326	214	540
Secondary Education (High School and Equivalent)	5	4	9	0	0	0	562	351	913	567	355	922
Associate Degree	0	0	0	0	0	0	145	152	297	145	152	297
Bachelor's Degree	0	0	0	0	0	0	76	100	176	76	100	176
Master's Degree	0	0	0	0	0	0	1	1	2	1	1	2
PhD	0	0	0	0	0	0	0	0	0	0	0	0

The data reveals that individual job counseling services are widespread in Adana, but activities such as vocational counseling, workplace and school visits remain limited compared to the Türkiye average. It is of great importance to increase these services to facilitate the integration of jobseekers into the labor market. In total, 72,554 individual job counseling interviews were conducted, compared to 2,721,841 in Türkiye (Table 30).



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**Table 30.** ISKUR Counseling and Employment Support Activities - Comparison of Adana and Türkiye Statistics

Number of Interviews and Participants	Activities	Adana	Türkiye
Number of Individual Interviews	<b>Business Consultancy</b>	72,554	<b>2,721,841</b>
	<b>Vocational Counseling</b>	1,820	<b>44,143</b>
	<b>Workplace Visit</b>	24,147	<b>695,536</b>
	<b>School Visit</b>	279	<b>9,185</b>
	<b>Group Interview Availability</b>	25,284	<b>897,525</b>
Number of Work Club Participants	<b>Male</b>	619	<b>18,708</b>
	<b>Female</b>	840	<b>32,917</b>
	<b>Total</b>	1,459	<b>51,625</b>

In terms of vocational counseling interviews, only 1,820 individual interviews were conducted in Adana, while this number is 44,143 in Türkiye. In terms of workplace visits, 24,147 visits were made in Adana, while this number is 695,536 in Türkiye. These visits are of great importance in terms of identifying labor demands by establishing direct contact with employers and creating suitable employment opportunities for job seekers.

**Table 31.** Individual Interview by Disability, Youth, Women and Higher Education Status

Individual Interview	Gender	Adana	Türkiye
Total Number of Interviews	<b>Male</b>	47,190	<b>1,633,950</b>
	<b>Female</b>	27,184	<b>1,132,034</b>
	<b>Total</b>	74,374	<b>2,765,984</b>
Young (15-24)	<b>Male</b>	9,244	<b>394,701</b>
	<b>Female</b>	5,914	<b>272,298</b>
	<b>Total</b>	15,158	<b>666,999</b>
Disabled	<b>Male</b>	5,189	<b>213,143</b>
	<b>Female</b>	991	<b>55,286</b>
	<b>Total</b>	6,180	<b>268,429</b>
Higher Education	<b>Male</b>	6,045	<b>216,101</b>
	<b>Female</b>	5,903	<b>241,861</b>
	<b>Total</b>	11,948	<b>457,962</b>



The data reveals that individual counseling services for youth and people with disabilities are widely available in Adana; however, access to these services remains lower for women and people with disabilities compared to men. Individual job counseling services need to be expanded to support the integration of people with disabilities into the labor market and to increase women's employment (Table 31). Overall, it is observed that individual job counseling services in Adana continue at a certain level for young job seekers, people with disabilities and higher education graduates, but especially women with disabilities and young women are at a lower level of access to counseling services.

The data reveals that participation in individual counseling is highest among primary and secondary education graduates, the rate of individual counseling decreases as the level of education increases, and women are less likely to participate in individual counseling services compared to men. In order to increase the employability of individuals with low levels of education in the labor market, individual counseling services should be expanded. Primary education graduates constitute the largest group with 32,942 individual counseling sessions, while secondary education graduates rank second with 27,036 individual counseling sessions. Associate's degree graduates conducted 6,738 interviews and bachelor's degree graduates conducted 5,020 interviews. Master's degree graduates conducted 182 individual interviews, while doctorate graduates conducted only 8 individual interviews (Table 33). This indicates that individuals with low and midium levels of education have a greater need for counseling services in the labor market and tend to benefit more from guidance mechanisms during the employment process.

As of 2023, there were 67,636 job vacancies in Adana, compared to 2,677,006 in Türkiye. An analysis of job placement data shows that a total of 41,425 people were employed in Adana. Of these, 32,619 were male and 8,806 were female. In Türkiye, a total of 1,237,026 people were placed in employment, of which 772,888 were men and 464,138 were women. This indicates that men find jobs at higher rates than women in the employment process.



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**Table 32.** Individual Interviews by Level of Education

Education Status		Adana	Türkiye
Illiterate	<b>Male</b>	222	<b>3,933</b>
	<b>Female</b>	164	<b>7,125</b>
	<b>Total</b>	386	<b>11,058</b>
Literate People (no formal education completed)	<b>Male</b>	1,247	<b>19,061</b>
	<b>Female</b>	815	<b>23,745</b>
	<b>Total</b>	2,062	<b>42,806</b>
Primary Education	<b>Male</b>	22,599	<b>756,975</b>
	<b>Female</b>	10,343	<b>465,798</b>
	<b>Total</b>	32,942	<b>1,222,773</b>
Secondary Education	<b>Male</b>	17,077	<b>637,880</b>
	<b>Female</b>	9,959	<b>393,505</b>
	<b>Total</b>	27,036	<b>1,031,385</b>
Associate Degree	<b>Male</b>	3,262	<b>107,403</b>
	<b>Female</b>	3,476	<b>130,588</b>
	<b>Total</b>	6,738	<b>237,991</b>
Bachelor's Degree	<b>Male</b>	2,689	<b>103,958</b>
	<b>Female</b>	2,331	<b>106,611</b>
	<b>Total</b>	5,020	<b>210,569</b>
Master's Degree	<b>Male</b>	87	<b>4,507</b>
	<b>Female</b>	95	<b>4,495</b>
	<b>Total</b>	182	<b>9,002</b>
PhD	<b>Male</b>	7	<b>233</b>
	<b>Female</b>	1	<b>167</b>
	<b>Total</b>	8	<b>400</b>
Total	<b>Male</b>	47,190	<b>1,633,950</b>
	<b>Female</b>	27,184	<b>1,132,034</b>
	<b>Total</b>	74,374	<b>2,765,984</b>

The female employment rate in Adana is lower than the Türkiye average. This situation reveals that there are structural barriers to the integration of women into the labor market and that policies that encourage women's employment should be increased (Table 33).

**Table 33.** ISKUR - Job Vacancies, Job Placements and Registered Unemployed by Statistics

Employment Status	Gender	Adana	Türkiye
Open Job Postings	<b>Total</b>	67,636	<b>2,677,006</b>
Job Placement	<b>Male</b>	32,619	<b>772,888</b>
	<b>Female</b>	8,806	<b>464,138</b>
	<b>Total</b>	41,425	<b>1,237,026</b>
Registered Unemployed	<b>Male</b>	31,110	<b>1,198,172</b>
	<b>Female</b>	33,370	<b>1,222,279</b>
	<b>Total</b>	64,480	<b>2,420,451</b>



In terms of registered unemployed, a total of 64,480 people are registered as unemployed in Adana. Of these, 31,110 are male and 33,370 are female. The total number of registered unemployed in Türkiye is 2,420,451. In Adana, the number of female unemployed is higher than the number of male unemployed.

### 2.2.3. TURKSTAT Domestic and International Migration Statistics

**Table 34.** Internal Migration Statistics: Türkiye vs. Adana, 2023

Migration Status	Adana
<b>Total Population</b>	<b>2,270,298</b>
Migration Received	66,104
Migration	77,898
Net Migration	- 11,794
Net Migration Rate (%)	-5,2



As of 2023, Adana is among the cities with net migration, with a total of 66,104 people migrating to Adana and 77,898 people leaving the city. This indicates that Adana experienced a net migration loss of 11,794 individuals, with a net migration rate calculated at -5.2% (Table 34).



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Adana is one of the provinces receiving migration with 66,104 people, and the main reason for migration is migration due to natural disasters and emergencies with 17,028 people. In addition, household/family dependent migration (10,534 people), better living conditions (9,090 people), education (7,975 people), transfer/job change (5,941 people) and starting a job/finding a job (4,718 people) account for the majority of migrants to Adana (Table 35).

**Table 35.** Reasons for Migration to Adana, 2023

Reason for Migration	Türkiye	Adana
<b>Total</b>	<b>3,450,953</b>	<b>66,104</b>
Transfer / Job Change	320,142	5,941
Starting a Job / Finding a Job	285,825	4,718
Education	512,011	7,975
Change of Marital Status / Family Reasons	152,046	3,012
Better Housing and Living Conditions	518,016	9,090
Migration Dependent on a Household / Family Member	601,481	10,534
Returning to Homestay/Hometown	99,975	504
Health / Care	19,450	289
Buying a House	95,570	1,022
Pension	49,890	571
Natural Disaster / Emergency	499,363	17,028
Other	103,547	1,078
Unknown	193,637	4,342



**Table 36.** Reasons for Out-Migration from Adana to Other Provinces, 2023

Reason for Migration	Total	Adana
<b>Total</b>	<b>3,450,953</b>	<b>77,898</b>
Transfer / Job Change	320,142	8,267
Starting a Job / Finding a Job	285,825	6,999
Education	512,011	14,654
Change of Marital Status / Family Reasons	152,046	3,885
Better Housing and Living Conditions	518,016	1,939
Migration Dependent on a Household/Family Member	601,481	5,813
Returning to Homestay/Hometown	99,975	1,601
Health / Care	19,450	415
Buying a House	95,570	1,412
Pension	49,890	902
Natural Disaster / Emergency	499,363	28,546
Other	103,547	2,145
Unknown	193,637	1,320

Adana is one of the provinces with 77,898 migrants, and the biggest reason for migration is natural disasters and emergencies with 28,546 migrants. Reasons such as education (14,654 people), finding a job (6,999 people) and transfer/job change (8,267 people) also constitute a significant portion of the individuals who left Adana (Table 36). Adana received 3,454 migrants while 9,861 people emigrated and the net migration loss was calculated as -6,407. The fact that the migration rate of men is higher than that of women indicates that labor force dynamics have shifted from Adana to other provinces. These data show that Adana continues to be an emigrant city and its demographic structure is affected by outward migration (Table 36).

Of those who came to Adana, 2,046 were male and 1,408 were female. Compared to Türkiye in general, the amount of migration received by Adana is quite low. Of those who left Adana, 5,762 were male and 4,099 were female. The fact that the number of people leaving Adana is much higher than the number of people arriving shows that employment and living conditions in the city are not more attractive compared to other cities. It should also be noted that this may be related to the earthquake in 2023.

**Table 37.** Incoming and Outgoing Migration and Gender, 2023

Migration Status	Gender	Türkiye	Adana
Total Population		85,372,377	2,270,298
Incoming Migration	<b>Total</b>	316,456	3,454
	<b>Male</b>	171,395	2,046
	<b>Female</b>	145,061	1,408
Outbound Migration	<b>Total</b>	714,579	9,861
	<b>Male</b>	394,186	5,762
	<b>Female</b>	320,393	4,099
Net Migration		- 398,123	- 6,407



## 2.3. Social Security and Labor Data

### 2.3.1. SSI Data (Type and Distribution of Insurance, Social Security Coverage)

A total of 2,252,634 people are covered by social security in Adana, with 581,893 people actively insured, 397,449 receiving income or pension and 947,500 benefiting from the system as dependents. 325,792 people are registered under General Health Insurance, which provides access to health services for low-income individuals and those without social security (Table 38).

Social security distribution in Adana is as follows:

#### 1. Number of Active Insured (581,893 people)

- In Adana, 417,670 (4/1-A) of the active insured employees are workers, compared to 9,058,412 in Türkiye as a whole.
- Within the scope of BAG-KUR (4/1-B), 76,545 people are registered, which is lower compared to 1,341,932 people in Türkiye.
- There are 87,678 people covered by the Pension Fund (4/1-C), which is a balanced distribution compared to 1,109,918 people in Türkiye.
- These data show that the social security system in Adana is largely composed of private sector employees and public servants.

## 2. Income and Monthly Recipients (397,449 people)

- The number of people receiving pension, disability or widow/widower pension in Adana is 397,449.
- Within this group, 272,474 people are workers (4/1-A), 69,144 people are BAG-KUR (4/1-B) and 55,831 people are civil servants (4/1-C).
- Compared to Türkiye as a whole, the proportion of those receiving income and pension under social security in Adana shows a balanced distribution.

## 3. Dependents (947,500 people)

- The number of dependents accessing health and social security through insured people in Adana is 947,500.
- Of these, 441,195 are workers (4/1-A), 309,662 are BAG-KUR members (4/1-B) and 196,643 are civil servants (4/1-C).
- These figures show that a large population of working people in Adana, including their families, are dependent on the social security system.

## 4. Registered under General Health Insurance (GHI) (325,792 people)

- The number of people insured under General Health Insurance (GHI) in Adana is 325,792.
- In Türkiye as a whole, this number is 3,211,694, and Adana's ratio of GHI beneficiaries in total social security coverage is higher than the Türkiye average.
- This indicates that individuals without social security coverage in Adana are able to access healthcare services through state support under the General Health Insurance (GHI) scheme.

**Table 38.** Social Security Coverage (4/1-A, 4/1-B, 4/1-C), 2023

SSI Status	SSI Coverage	Adana	Türkiye
Social Security Coverage		<b>2,252,634</b>	<b>34,250,646</b>
Active Insured	<b>4/1-A</b>	417,670	9,058,412
	<b>4/1-B</b>	76,545	1,341,932
	<b>4/1-C</b>	87,678	1,109,918
	<b>Total</b>	<b>581,893</b>	<b>11,510,262</b>
Income and Monthly Recipients	<b>4/1-A</b>	272,474	4,861,607
	<b>4/1-B</b>	69,144	871,024
	<b>4/1-C</b>	55,831	839,401
	<b>Total</b>	<b>397,449</b>	<b>6,572,032</b>
Dependent	<b>4/1-A</b>	441,195	6,615,826
	<b>4/1-B</b>	309,662	3,860,196
	<b>4/1-C</b>	196,643	2,480,636
	<b>Total</b>	<b>947,500</b>	<b>12,956,658</b>
Social Security Coverage, 4/1-A		<b>1,131,339</b>	<b>20,535,845</b>
Social Security Coverage, 4/1-B		<b>455,351</b>	<b>6,073,152</b>
Social Security Coverage, 4/1-C		<b>340,152</b>	<b>4,429,955</b>
Those Registered under General Health Insurance		<b>325,792</b>	<b>3,211,694</b>

Adana has a large population registered in the social security system, but unregistered workers should also be taken into account. The number of retirees is high, which may indicate that the city has an aging population structure. The number of BAG-KUR (Social Security Institution for the Self-Employed) employees suggests that there is not enough entrepreneurship for the industrial and agricultural sectors. The high number of people subject to General Health Insurance indicates that low-income or unemployed individuals need health insurance.

There are a total of 517,927 compulsory insured people in Adana, with workers (4/1-A) constituting the largest group. The low female employment rate compared to the male employment rate reveals the need for policies that encourage women's participation in the labor force, especially in the private sector and agriculture (Table 39).

**Table 39.** Distribution of Compulsory Insured People by Gender (4/1-A, 4/1-B, 4/1-C), 2023

SSI Status	SSI Coverage	Gender	Adana	Türkiye
4/1-A Compulsory Insured		Male	247,650	5,260,477
		Female	108,973	2,864,073
		Total	356,623	8,124,550
4/1-B Compulsory Insured	Compulsory (Except Agriculture)	Male	46,644	900,069
		Female	16,478	265,494
		Total	63,122	1,165,563
	Mukhtar	Male	384	3,335
		Female	12	222
		Total	396	3,557
	Agriculture Compulsory	Male	7,999	82,086
		Female	2,120	20,707
		Total	10,119	102,793
	4/1-B Compulsory Insured Total	Male	55,027	985,490
		Female	18,610	286,423
		Total	73,637	1,271,913
4/1-C Compulsory Insured		Male	50,902	632,128
		Female	36,765	477,592
		Total	87,667	1,109,720
Total Number of Compulsory Insured			<b>517,927</b>	<b>10,506,183</b>

Among all insured employees, men are recorded as 353,579 and women as 164,348. This shows that female employment in Adana is lower than male employment. In the private sector (4/1-A) and among the self-employed (4/1-B), the proportion of women is quite low, while in the public sector (4/1-C) the ratio is slightly more balanced.



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While the private sector accounts for the majority of employment in Adana, the proportion of female employees is low and wage inequality is noteworthy. As of 2023, Adana has a total of 48,053 workplaces, the majority of which belong to the private sector (47,245 workplaces). The number of workplaces in the public sector is only 808 (Table 39).

A total of 356,623 people are insured in Adana. 299,597 of these employees have permanent status and 57,026 have temporary status. Among insured employees, 69% are male (247,650) and 31% are female (108,973), with a significant gender gap. When average daily earnings are analyzed, the average daily income of female employees (609.77 TRY) is lower than that of males (729.32 TRY). Public sector workers (880.26 TRY) have higher earnings than private sector workers (662.38 TRY). The overall average daily earnings are 693.09 TRY in Adana and 797.99 TRY in Türkiye. In sum, 98% of Adana's workplaces are in the private sector. Male employment is higher than female employment. Women's average earnings are lower than men's, indicating wage inequality. Average earnings are significantly higher in the public sector than in the private sector. Average daily earnings in Adana are below the average for Türkiye.





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**Table 40.** Breakdown of 4/1-A Workplaces, Compulsory Insured People and Average Daily Earnings, Sector and Gender, 2023: Comparison of Adana and Türkiye

4/1-A Scope	Sector	Adana	Türkiye Overall
Workplace	<b>Permanent</b>	44,381	<b>1,992,551</b>
	<b>Temporary</b>	3,672	<b>186,572</b>
	<b>Public</b>	808	<b>46,660</b>
	<b>Private Sector</b>	47,245	<b>2,132,463</b>
	<b>Total</b>	<b>48,053</b>	<b>2,179,123</b>
Compulsory Insured	<b>Permanent</b>	299,597	<b>14,064,318</b>
	<b>Temporary</b>	57,026	<b>2,342,102</b>
	<b>Public</b>	47,017	<b>1,936,402</b>
	<b>Private Sector</b>	309,606	<b>14,470,018</b>
	<b>Male</b>	247,650	<b>10,871,438</b>
	<b>Female</b>	108,973	<b>5,534,982</b>
	<b>Total</b>	<b>356,623</b>	<b>16,406,420</b>
Average Daily Earnings (TRY)	<b>Permanent</b>	696,69	<b>820.17</b>
	<b>Temporary</b>	671,13	<b>644.8</b>
	<b>Public</b>	880,26	<b>1,028,11</b>
	<b>Private Sector</b>	662,38	<b>764,15</b>
	<b>Male</b>	729,32	<b>835,75</b>
	<b>Female</b>	609,77	<b>723,47</b>
	<b>Total</b>	<b>693,09</b>	<b>797,99</b>

The number of insured active employees in Adana fluctuated throughout 2023. The total number of insured employees, which was 576,029 in January, fluctuated in the following months of the year, reaching 579,356 in September and 581,750 in December. The number of insured employees fluctuated throughout the year, with the largest group being workers 4/1-A with 415,966 people. The number of insured under BAG-KUR (4/1-B) was 77,058, of which 9,273 were agricultural insured. Public employees (4/1-C) followed a stable course with 88,726 people (Table 41).



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**Table 41.** General SSI Data Specific to Adana, 2023

Indicator	City	2024.01	2024.02	2024.03	2024.04	2024.05	2024.06	2024.07	2024.08	2024.09	2024.01
Insured, Active Total (4a, 4b, 4c)	Adana	576,029	577,322	577,420	574,359	577,604	569,042	547,623	550,233	579,356	581,750
Insured, Active Total (4a)	Adana	411,904	413,430	417,362	410,756	410,006	405,969	362,365	414,757	415,956	419,596
Insured, Active Total (4b)	Adana	66,151	65,698	65,334	65,511	66,475	664,13	66,521	66,475	66,524	66,599
Insured, Active Total (4b) (Excluding Agriculture)	Adana	38,180	37,489	37,680	37,872	37,728	37,653	37,825	37,876	38,183	38,576
Insured, Active Total (4c)	Adana	53,434	52,558	56,395	62,188	72,892	73,367	73,653	73,568	73,612	73,365
Insured, Active Compulsory Insured (4a)	Adana	234,149	236,083	238,049	236,912	239,332	236,987	235,512	234,995	235,619	235,987
Insured, Active Compulsory Insured (4b)	Adana	62,148	72,545	73,063	72,963	72,937	73,163	73,253	73,325	73,369	73,345
Insured, Active Compulsory Insured (4b) (Except Agriculture and Mukhtar)	Adana	9,874	9,728	9,598	9,357	9,262	9,186	9132	9,128	9,126	9,123
Insured, Active Compulsory Insured (4b) (Agriculture)	Adana	52,274	51,817	51,765	51,763	51,845	51,867	51,875	51,890	51,893	51,888
Insured, Active Agricultural Insured (2925 S.K.) (4a)	Adana	1,585	1,564	1,616	1,673	1,714	1,768	1,782	1,793	1,810	1,821
Insured, Active Apprentice (4a)	Adana	18,312	18,098	17,872	17,654	17,509	17,368	17,213	17,145	17,092	17,048
Insured, Active Interns and Trainees (4a)	Adana	8,872	8,896	8,912	8,930	8,945	89,58	8,962	8,968	8,975	8,982
Insured, Active Mukhtar (4b)	Adana	7,500	7,478	7,469	7,463	7,461	7,460	7,459	7,457	7,456	7,455
Insured, Active Other Insured (4a)	Adana	2,912	2,868	2,865	2,869	2,871	2,851	2,832	2,832	2,866	2,868
Insured, Active Optional Insured (4b) (Excluding Agriculture)	Adana	2,912	2,868	2,865	2,869	2,871	2,851	2,832	2,832	2,866	2,868
Insured, Active Optional Insured (4b) (Excluding Agriculture)	Adana	0	0	0	0	0	0	0	0	0	0

The number of compulsorily insured employees declined in the summer season and recovered in the fall. The number of apprentices, interns and trainees fluctuated, reaching its lowest level in July, before rising again in September and October. The number of mukhtar insured people was very low and changed little throughout the year.

### 2.3.2. Work Permit Statistics from the Ministry of Labor and Social Security

A total of 4,062 foreigners have work permits in Adana, the majority of whom are men. The low number of female employees suggests that foreign women may be working informally. In Türkiye, a total of 140,480 foreigners were granted work permits and Adana's share is quite low (Table 42).

**Table 42.** Gender Breakdown of Work Permits Issued to Foreigners, 2023

Province	Adana	Türkiye
<b>Female</b>	596	<b>33,449</b>
<b>Male</b>	3,466	<b>107,031</b>
<b>Total</b>	<b>4,062</b>	<b>140,480</b>

### 2.4. Data from the Presidency of Migration Management

In Türkiye, 1,065,902 foreigners live with a residence permit. Adana, with a population of 4,776 foreigners, is in the middle of the list of provinces with the highest number of foreigners living in Türkiye with a residence permit, ranking 23rd (Table 43).

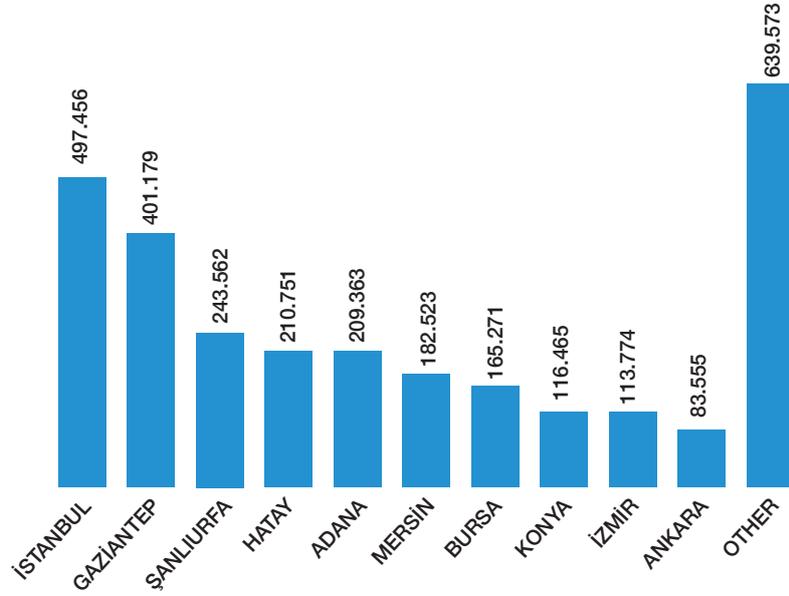
Graphic 5 shows the distribution of SuTPs in the top 10 provinces in Türkiye as of January 30, 2025. With a SuTP population of 209,363, Adana ranks as the 5th province hosting the highest number of SuTPs in the country. This indicates that Adana is a significant hub for migration flows and that the SuTP population has formed a lasting demographic presence in the city.



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**Graphic 5.** Distribution of Foreigners with Residence Permit in Türkiye by Province (2025)



\*30.01.2025 as of the date





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**Table 43.** Distribution of Foreigners in Türkiye with Residence Permit by Provinces as of 27.02.2025

Province Order	Province	Total Number of Foreigners	Province Order	Province	Total Number of Foreigners
1	İstanbul	532.352	42	Kahramanmaraş	1.675
2	Antalya	105.377	43	Şanlıurfa	1.671
3	Ankara	69.667	44	Kırşehir	1.621
4	Bursa	48.169	45	Yozgat	1.589
5	Mersin	44.401	46	Bartın	1.582
6	İzmir	27.913	47	Kastamonu	1.536
7	Muğla	19.886	48	Burdur	1.521
8	Yalova	17.016	49	Çankırı	1.397
9	Sakarya	15.577	50	Ordu	1.369
10	Kocaeli	13.878	51	Cümüşhane	1.320
11	Gaziantep	9.816	52	Nevşehir	1.310
12	Aydın	9.635	53	Elazığ	1.279
13	Konya	9.481	54	Diyarbakır	1.229
14	Samsun	8.705	55	Van	1.187
15	Karabük	7.886	56	Malatya	1.152
16	Eskişehir	7.451	57	Rize	967
17	Tekirdağ	6.834	58	Niğde	959
18	Edirne	6.670	59	Mardin	957
19	Kayseri	6.257	60	Erzincan	788
20	Trabzon	6.046	61	Kars	721
21	Balıkesir	5.884	62	Karaman	708
22	Kütahya	5.312	63	Osmaniye	692
23	Adana	4.914	64	Kilis	673
24	Bolu	4.729	65	Kırıkkale	666
25	Denizli	3.999	66	Iğdır	597
26	Kırklareli	3.661	67	Şırnak	591
27	Çanakkale	3.623	68	Amasya	557
28	Tokat	2.984	69	Hakkari	555
29	Manisa	2.864	70	Adıyaman	485
30	Afyonkarahisar	2.803	71	Batman	458
31	Hatay	2.802	72	Bitlis	458
32	Isparta	2.764	73	Ağrı	450
33	Sivas	2.616	74	Bayburt	441
34	Düzce	2.163	75	Artvin	358
35	Aksaray	2.109	76	Sinop	342
36	Uşak	2.093	77	Siirt	335
37	Çorum	2.020	78	Bingöl	316
38	Erzurum	1.984	79	Ardahan	254
39	Giresun	1.919	80	Muş	117
40	Bilecik	1.843	81	Tunceli	54
41	Zonguldak	1.816			



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Adana is the 5th province in Türkiye with the highest number of people with Social Security Insurance, with a population of 209,363 (Table 47). Considering the ratio of Adana's SuTPs population to the total provincial population, it has a significant impact on the demographic structure of the city. In Adana, the PDSS population corresponds to approximately 10% of the total population of the city.





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**Table 44.** Distribution of Syrians under Temporary Protection by Province

Province Order	Provinces	SuTPs	Province Population	Total Number of People Living in the Province	SuTPs Rate
1	İstanbul	491,026	15,701,602	16,192,628	3,90%
2	Gaziantep	394,900	2,193,683	2,588,263	15,26%
3	Şanlıurfa	242,021	2,237,785	2,479,766	9,76%
4	<b>Adana</b>	<b>207,333</b>	<b>2,200,484</b>	<b>2,487,817</b>	<b>8,33%</b>
5	Hatay	204,067	1,562,185	1,766,252	11,55%
6	Mersin	178,783	1,954,279	2,133,062	8,81%
7	Bursa	162,928	3,238,618	3,401,546	4,79%
8	Konya	115,360	2,330,028	2,445,384	4,97%
9	İzmir	112,503	4,493,242	4,605,745	2,44%
10	Kahramanmaraş	80,123	1,134,105	1,214,228	6,60%
11	Kayseri	75,212	1,452,458	1,527,670	4,92%
12	Kilis	61,306	156,738	218,045	28,12%
13	Kocaeli	49,058	2,130,006	2,179,064	2,25%
14	Mardin	45,530	1,145,911	1,191,441	4,00%
15	Osmaniye	35,603	361,062	596,668	5,97%
16	Malatya	26,508	750,491	776,995	3,41%
17	Ankara	22,147	5,864,049	5,946,196	1,38%
18	Diyarbakır	21,477	1,833,684	1,885,161	1,16%
19	Adıyaman	20,083	611,037	631,120	3,18%
20	Sakarya	14,370	1,110,735	1,125,105	1,28%
21	Manisa	12,660	1,475,353	1,488,013	0,85%
22	Denizli	12,617	1,061,371	1,073,988	1,19%
23	Batman	11,991	654,528	665,719	1,83%
24	Tekirdağ	11,086	1,167,162	1,198,208	0,90%
25	Elazığ	10,331	601,981	612,272	1,68%
26	Muğla	9,948	1,083,867	1,092,815	0,91%
27	Afyonkarahisar	8,798	750,393	758,991	1,16%
28	Aydın	7,971	1,165,943	1,173,914	0,68%
29	Samsun	7,787	1,382,376	1,390,563	0,56%
30	Burdur	7,780	775,826	783,606	2,70%
31	Eskişehir	6,723	921,630	928,353	0,72%



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**Table 44.** Distribution of Syrians under Temporary Protection by Province

Province Order	Provinces	SuTPs	Province Population	Total Number of People Living in the Province	SuTPs Rate
32	Antalya	6,710	2,722,108	2,728,853	0,25%
33	Isparta	6,098	446,409	453,402	1,54%
34	Niğde	4,788	372,708	377,496	1,27%
35	Yozgat	4,613	413,161	417,774	1,10%
36	Balıkesir	3,975	1,276,096	1,280,071	0,31%
37	Kütahya	3,940	571,078	572,072	0,70%
38	Trabzon	3,444	822,270	825,714	0,42%
39	Çorum	3,330	521,335	524,665	0,63%
40	Yalova	3,268	307,882	311,150	1,05%
41	Çanakkale	3,263	568,966	572,229	0,57%
42	Siirt	3,139	336,453	339,592	0,92%
43	Bolu	3,134	326,408	329,743	1,01%
44	Uşak	2,868	375,310	378,178	0,76%
45	Aksaray	2,847	439,474	442,321	0,64%
46	Sivas	2,768	637,007	639,775	0,43%
47	Nevşehir	1,971	317,952	319,923	0,36%
48	Şırnak	1,922	570,826	572,748	0,38%
49	Bingöl	1,711	283,278	284,447	0,41%
50	Kırıkkale	1,618	283,053	284,671	0,57%
51	Muş	1,351	392,301	393,652	0,34%
52	Tokat	1,341	612,674	613,998	0,22%
53	Kırşehir	1,308	244,546	245,850	0,53%
54	Van	1,287	1,118,087	1,119,374	0,11%
55	Düzce	1,231	412,344	413,585	0,30%
56	Amasya	1,117	342,378	343,495	0,33%
57	Karabük	1,087	250,478	251,565	0,43%
58	Kastamonu	1,080	381,991	383,071	0,28%
59	Bitlis	1,042	359,808	360,850	0,29%
60	Bilecik	908	228,495	229,403	0,40%
61	Karaman	798	262,791	263,509	0,30%
62	Erzurum	775	745,005	745,780	0,10%



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**Table 44.** Distribution of Syrians under Temporary Protection by Province

Province Order	Provinces	SuTPs	Province Population	Total Number of People Living in the Province	SuTPs Rate
63	Kırklareli	638	379,081	379,669	0,17%
64	Çankırı	535	199,981	200,516	0,27%
65	Edirne	476	421,247	421,723	0,11%
66	Zonguldak	385	586,802	587,387	0,10%
67	Ordu	377	770,711	771,088	0,05%
68	Giresun	317	455,622	456,238	0,07%
69	Bartın	244	206,715	206,959	0,12%
70	Sinop	201	226,957	227,158	0,05%
71	Kars	159	272,300	272,459	0,06%
72	Rize	131	346,797	348,108	0,30%
73	Ardahan	99	91,354	91,453	0,11%
74	Cümüşhane	96	142,617	142,713	0,07%
75	Bayburt	81	83,676	83,707	0,10%
76	Iğdır	78	206,857	206,935	0,04%
77	Artvin	65	169,200	169,345	0,08%
78	Tunceli	42	86,612	86,654	0,05%
79	Ağrı	23	499,801	500,624	0,16%
80	Erzincan	12	241,238	241,351	0,01%
81	Hakkari	7	282,191	282,198	0,00%

In this section, official statistics and secondary data analysis on the demographic, socio-economic and sectoral structure of Adana are evaluated. In order to support these findings, the results of the survey conducted in the next section will be analyzed.



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## 2.5. Highlighted Findings in the Analysis of Secondary Data

### Population and Demographic Structure



- Adana's population is 2,270,298 as of 2023. 's total population is 85,372,377 and Adana's share in the total population is approximately 2.66%.
- The population growth rate was realized as -1.7%. This rate showed a significant decrease from 4.7% in 2021-2022.
- The median age is 33.5 years, which is very close to the average for (34). This value indicates that Adana has a high proportion of young population.
- Gender distribution is balanced: 1,135,046 males and 1,135,252 females.
- Population density is above 's average; the number of people per km<sup>2</sup> in Adana is 163 ( average: 111).

### Labor Force and Employment Statistic



- Adana's unemployment rate is 14%, which is higher than 's average of 9.4%.
- The employment rate is 43.7%, which is lower than 's average of 48.3%.
- The labor force participation rate is 50.9%. This is lower than the 53.3% rate in as a whole.
- According to ISKUR data, the number of registered unemployed in Adana is 64,480. The female unemployment rate is higher than the male rate. The highest number of job placements was made among young people between the ages of 15-24.
- The number of job vacancies is 67,636, almost all of which are in the private sector.



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### Migration Movements and Social Security

- Adana is a net migrant city in 2023, with a total net migration of -11,794 people and a net migration rate of -5.2%.
- The biggest reasons for migration are natural disasters (17,028 people), family dependent reasons (10,534 people) and better living conditions (9,090 people).
- Natural disasters (28,546 people), education (14,654 people) and search for employment (6,999 people) are the main reasons for out-migration.
- The number of people covered by social security is 2,252,634.
- The number of active insured employees is 581,893 and the majority of them are private sector employees.



### Dynamics of the Labor Market

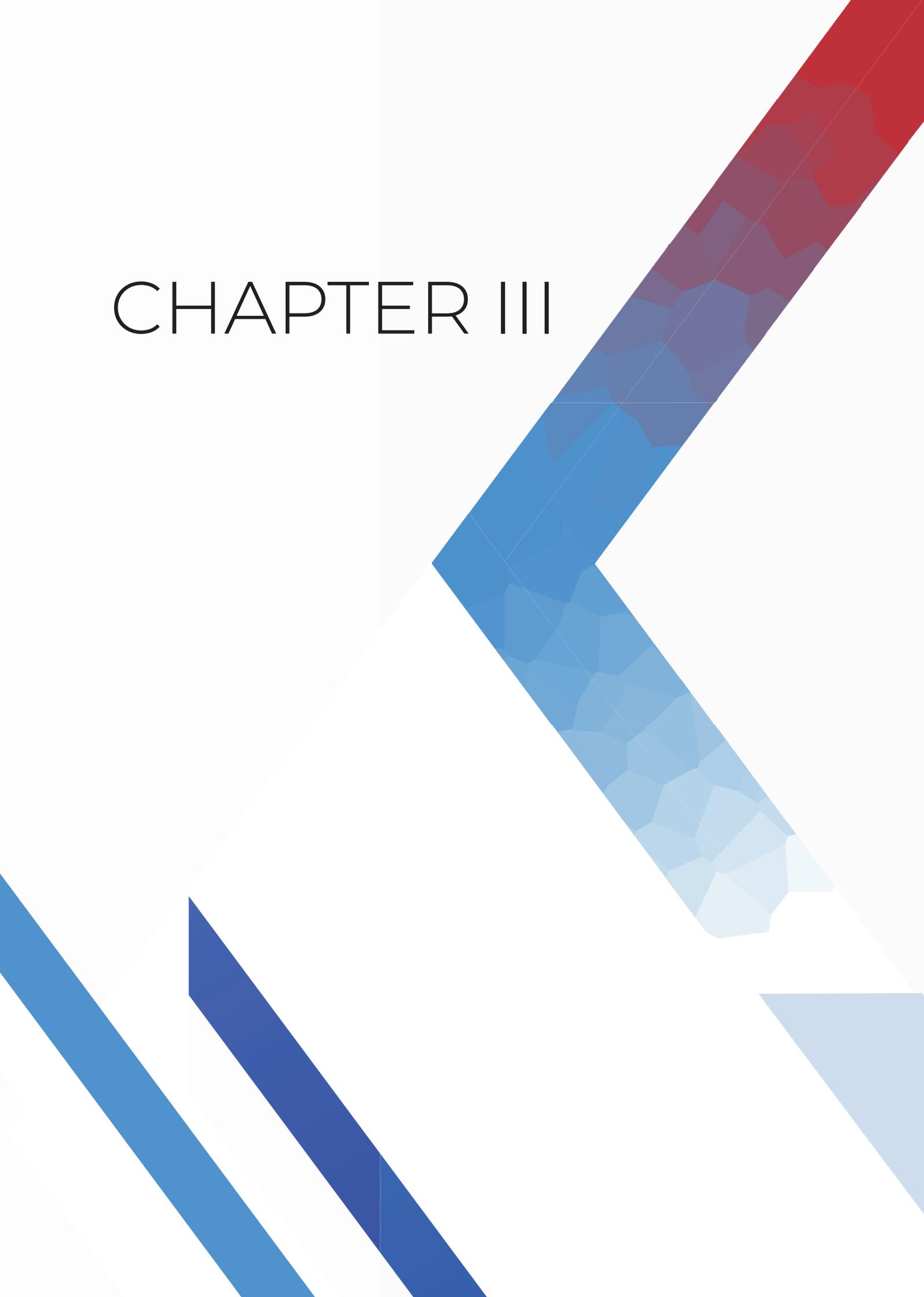
- In Adana, female employment rate is lower than male employment rate.
- The average daily earnings based on premium is 729 TL for men and 609 TL for women, while the general average is 693 TL.
- Young people (15-24 years old) constitute the largest group in terms of unemployment benefit or job placement.



### Foreign Population and Temporary Protection

- The number of foreigners living in Adana with a residence permit is 4,914.
- The number of reached 207,333 people.
- The ratio of the Syrian population to the total population is 8.33%. This rate is well above 's average of 3.3%.
- Adana is the 4th province in with the highest number of PDSS.

# CHAPTER III





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# CHAPTER III

## 3. SURVEY ANALYSIS AND FINDINGS

### 3.1. Demographic Data

This research was conducted with a total of 56 participants in Adana province. However, two participants did not provide information on their gender, age, educational background and length of service in their current organization, while three participants did not specify their position. According to the available data, 60.7% of the participants are female and 35.7% are male. When the age groups are analyzed, the largest group is the 25-34 age group with 44.6%, followed by the 35-44 age group with 39.3% (Table 45).

**Table 45.** Demographic Analysis of Adana Participants

Demographic Information	Indicators	n	%
<b>Gender</b>	Female	34	60,7
	Male	20	35,7
<b>Age</b>	18-24	3	5,4
	25-34	25	44,6
	35-44	22	39,3
	45-54	4	7,1
<b>Education Status</b>	High School	2	3,6
	Associate Degree	2	3,6
	Bachelor's Degree	40	71,4
	Master's Degree	9	16,1
	PhD	1	1,8



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**Table 45.** Demographic Analysis of Adana Participants

Demographic Information	Indicators	n	%
<b>Duration of Employment at the Institution*</b>	0-1 year	8	14,3
	2-5 years	21	37,5
	6-10 years	8	14,3
	11-15 years	13	23,2
	16 Years and Above	4	7,1
<b>Employed Institution</b>	Private Sector Representation	11	19,6
	Türk Kızılay	8	14,3
	Public Institutions and Organizations	24	42,9
	Civil society Organizations	9	16,1
	Professional Chamber	3	5,4
	Other	1	1,8
<b>Position**</b>	Administrator	2	3,6
	Expert	20	35,7
	Counselor	18	32,1
	Other	13	23,2

**Notes=** n=56, \*2 participants left blank their gender, age, education level and length of service at their institution,  
\*\* 3 participants left their position in the organization blank.

The educational level of the participants is mostly composed of undergraduate graduates (71.4%). In terms of the time spent in the organization, the largest group is composed of participants with 2-5 years of experience with 37.5%. This is followed by those who have worked for 11-15 years with 23.2%.

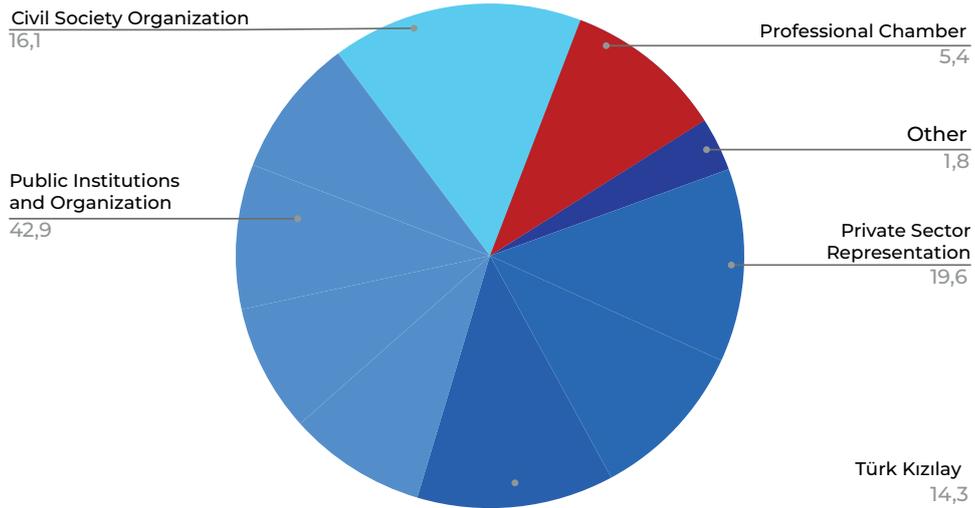




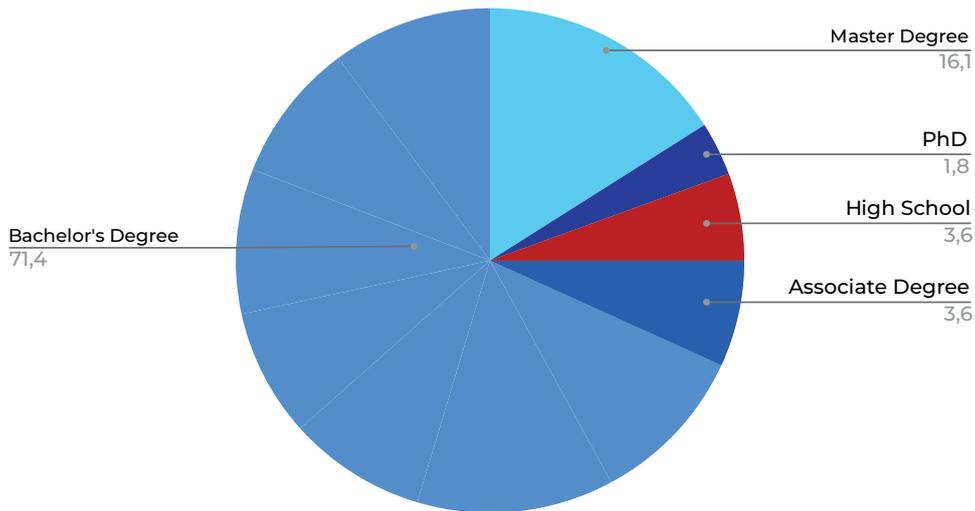
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**Graphic 6.** Institutional Distribution of Participants



**Graphic 7.** Education Level of Participants



Of the individuals participating in the research, 42.9% work in public institutions and organizations and 19.6% work in the private sector. When the position distribution of the participants is analyzed, it is seen that 35.7% are experts, 32.1% are consultants, 23.2% work in different positions, and 3.6% are managers.

When these findings are evaluated in general, it is understood that the majority of the individuals participating in the research are in the middle age group, have a bachelor's degree and have 2-5 years of experience. The majority of the participants work in the public sector, and the most common positions are expert and consultant roles.

### 3.2. Labor Market Analysis

In order to understand the observations and views of the participants on the labor market in Adana, they were asked to respond to the questions **“How do you evaluate the current situation of the labor market in your province?”** and **“What is your level of agreement with the reasons for the decrease or stagnation of employment in your province?”**

An analysis of respondents' views on the labor market in Adana reveals that the proportion of respondents who think that economic difficulties have reduced job opportunities is the highest (46.4%). This shows that there is a widespread perception that employment opportunities are shrinking. On the other hand, 33.9% stated that the demand for skilled labor has increased in certain sectors, while 14.3% stated that some sectors are in the process of development. The share of those who think that there is a balance between job opportunities and job seekers is quite low (3.6%). In general, it can be said that the perception of the labor market is shaped around economic challenges and sectoral differences (Table 46).

Respondents cited **“lack of sectoral innovation”** and **“insufficient vocational training opportunities”** as the main reasons for the decline or stagnation of employment in Adana (Table 47). Job displacement to other regions or countries is also seen as an important factor (64.3%). Respondents expressed a moderate view on the impact of automation on employment (39.3%), with less support for the view that the transition to sustainable industries has led to job losses. On the other hand, an aging and irreplaceable workforce is considered a critical problem for employment dynamics (64.3%).



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**Table 46.** Labor Market Overview – Adana

<b>Question:</b> How do you observe the current situation of the labor market in your province?		
<b>Evaluations</b>	<b>n</b>	<b>%</b>
There is a balance between job opportunities and job seekers	2	3,6
The demand for skilled labor in specific sectors has increased.	19	33,9
Job opportunities have diminished due to economic difficulties.	26	46,4
There is a transition period in which new job demands are emerging and some sectors are in the process of development.	8	14,3
I don't have sufficient information to evaluate	1	1,8
<b>Total</b>	<b>56</b>	<b>100</b>

**Table 47.** Reasons for Decline or Stagnation in Employment in Adana

<b>Question:</b> To what extent do you agree that the following are reasons for the decline or stagnation of employment in your province										
<b>Statements</b>	<b>Strongly Disagree</b>		<b>Disagree</b>		<b>Moderately Agree</b>		<b>Agree</b>		<b>Strongly Agree</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Technological developments leading to automation	1	1,8	6	10,7	27	48,2	17	30,4	5	8,9
Shifting or outsourcing of work to other regions or countries	-	-	3	5,4	17	30,4	20	35,7	16	28,6
Decline in market demand for goods or services	1	1,8	14	25,0	14	25,0	22	39,3	5	8,9
Transition to greener and more sustainable industries	7	12,5	18	32,1	13	23,2	15	26,8	3	5,4
Aging infrastructure or lack of innovation in the sector	3	5,4	4	7,1	13	23,2	27	48,2	9	16,1
Aging and unreplaced labor force	1	1,8	6	10,7	13	23,2	24	42,9	12	21,4
High demand exceeding local talent supply	3	5,4	9	16,1	17	30,4	17	30,4	10	17,9
Reduced opportunities for vocational training/capacity building	-	-	6	10,7	11	19,6	21	37,5	18	32,1



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### 3.3. Labor Demand and Qualified Personnel Shortage

In order to understand the observations and views of the respondents on the labor demand and shortage of skilled personnel in Adana, the following questions were asked: “**How would you rate the importance of the following factors affecting labor demand in sectors with high demand in your province?**”, “**Which sectors in your province are currently experiencing a shortage of skilled labor supply?**”, “**To what extent do you agree that the following factors are the causes of the skilled labor shortage in your province?**”, “**To what extent do you think there is a skills and talent gap in the following sectors in your province?**”, and “**How effective do you think the following initiatives will be in closing the skills and talent gap in your province?**”.

Respondents highlighted incentives (87.5%), changes in consumer behavior (82.1%), regional economic growth (67.9%) and demand for skilled labor (80.3%) as the factors that most affect labor demand in Adana. Technological integration (66.1%) and the formation of new sectors (71.5%) are also considered important in labor force dynamics. Urbanization and infrastructure projects are of lower importance. These findings suggest that the labor market is shaped by government support, economic growth and demand for skilled labor (Table 48).

**Table 48.** Importance of Factors Affecting Labor Demand in High Demand Sectors in Adana

<b>Question:</b> How would you rate the importance of the following factors affecting labor demand in sectors with high demand in your province?										
Factors	Very Insignificant		Unimportant		Moderately important		Important		Very important	
	n	%	n	%	n	%	n	%	n	%
Evaluations										
Regional economic growth	-	-	-	-	18	32,1	16	28,6	22	39,3
Increased technological integration in enterprises	-	-	2	3,6	17	30,4	29	51,8	8	14,3
Creation of new sectors that increase labor demand	-	-	5	8,9	11	19,6	24	42,9	16	28,6
Incentives	-	-	2	3,6	5	8,9	19	33,9	30	53,6
Growing demand for skilled professionals	-	-	4	7,1	7	12,5	27	48,2	18	32,1
Urbanization and infrastructure projects	1	1,8	10	17,9	8	14,3	22	39,3	15	26,8
Changes in consumer behavior or market needs	-	-	3	5,4	7	12,5	26	46,4	20	35,7

According to respondents, manufacturing (n=35) and finance and insurance activities (n=28) stand out as the sectors with the highest shortage of qualified labor in Adana's labor market. Agriculture, forestry and fishing (n=17) and accommodation and food services (n=17) sectors also face similar challenges (see Table 49).

While supply shortages are also observed in education, professional and scientific activities, water supply and waste management, this problem is less pronounced in wholesale-retail trade (n=3) and transportation-storage (n=4).

These findings suggest that qualified labor force training and employment policies should be developed in the manufacturing, finance, agriculture and tourism sectors. Investing in vocational development programs, especially in education and technical services, can support employment dynamics in the region.

**Table 49.** Adana Sectors with Shortage of Skilled Labor Supply

Question: In which sectors is there currently a shortage of qualified labor supply in your province?	
Sectors	Number of Markings
[1] Agriculture, Forestry and Fisheries	17
[2] Mining and Quarrying	8
[3] Manufacturing	35
[4] Electricity, Gas, Steam and Air Conditioning Production and Distribution	10
[5] Water Supply; Sewerage, Waste Management and Improvement Activities	12
[6] Construction	11
[7] Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	3
[8] Transportation and Warehousing	4
[9] Accommodation and Food Service Activities	17
[10] Information and Communication	11
[11] Finance and Insurance Activities	28
[12] Professional, Scientific and Technical Activities	12
[13] Administrative and Support Service Activities	12
[14] Education	12
[15] Culture, Arts, Entertainment, Leisure and Sports	6
[16] Other Service Activities (e.g: Repair of computers, communication equipment, household goods, clothing, hairdressers, barbershops)	10
<b>Notes =</b> Respondents marked more than 1 in the sectors where there is a shortage of qualified labor supply in Adana province.	

According to respondents, the main reasons for the shortage of skilled labor in Adana are migration (82.1%), low wages and poor working conditions (91.1%). In addition, existing training programs do not meet the needs of the labor market (62.5%), the workforce is aging and new skills are not being trained (71.5%) (Table 50).

Lack of sufficient information about job opportunities (58.9%) and lack of qualified workers to adapt to rapid technological advances (53.6%) are other factors highlighted. In some sectors, the available labor force cannot meet demand (48.2%).

In line with these findings, it can be suggested that wages and working conditions should be improved, training programs should be updated, job opportunities should be better promoted and young people should be directed to vocational training.

**Table 50.** Reasons for Qualified Labor Shortage in Adana (n=56)

<b>Question:</b> To what extent do you agree that the following factors are the causes of the skilled labor shortage in your province?										
Reasons Factors	Strongly Disagree		Disagree		Moderately Agree		Agree		Strongly Agree	
	n	%	n	%	n	%	n	%	n	%
Lack of Relevant Education or Training Programs	-	-	9	16,1	12	21,4	16	28,6	19	33,9
Migration of Skilled Labor to Other Regions or Countries	-	-	3	5,4	7	12,5	19	33,9	27	48,2
Limited Awareness of Job Opportunities	1	1,8	5	8,9	17	30,4	21	37,5	12	21,4
Rapid Technological Advances	1	1,8	9	16,1	16	28,6	20	35,7	10	17,9
Low Wages or Poor Working Conditions	1	1,8	-	-	4	7,1	14	25,0	37	66,1
Aging and Non-Replacing Labor Force*	-	-	6	10,7	10	17,9	17	30,4	23	41,1
High Demand Exceeding Local Talent Supply	4	7,1	8	14,3	17	30,4	18	32,1	9	16,1

**Notes** \* 1 participant did not make a preference for this item. For missing data, data assignment was performed with the serial average method.

According to respondents, there are skills and talent gaps in many sectors in Adana. The highest shortages are observed in the professional/scientific/technical activities (82.1%), manufacturing (85.7%), information and communication (78.6%) and finance/insurance (69.7%) sectors. This shows that the need for qualified labor force is increasing in technology, finance and scientific fields (Table 51).

Sectors with moderate skills shortages include electricity, gas and air conditioning (67.9%), education (71.4%), administrative support services (64.3%) and water/waste management (66.1%). There continues to be a shortage of skilled labor in these areas. Sectors with relatively low skill shortages are agriculture (41%), mining (33.9%), accommodation and food services (46.4%) and transportation (42.9%). Strengthening vocational training programs and increasing university-industry cooperation may be recommended to close the labor shortage, especially in technical and scientific fields.

**Table 51.** Sectoral Skill and Talent Gaps in Adana

<b>Question:</b> To what extent do you think there is a skills and talent gap in the following sectors in your province?								
<b>Sectors</b>	<b>No</b>		<b>Quite a Few</b>		<b>Moderate</b>		<b>Too Much</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>Factors</b>								
[1] Agriculture, Forestry and Fishing*	4	7,1	19	33,9	22	39,3	10	17,9
[2] Mining and Quarrying	7	12,5	12	21,4	30	53,6	7	12,5
[3] Manufacturing	1	1,8	7	12,5	25	44,6	23	41,1
[4] Electricity, Gas, Steam and Air Conditioning Production and Distribution	1	1,8	17	30,4	23	41,1	15	26,8
[5] Water Supply; Sewerage, Waste Management and Improvement Activities	4	7,1	15	26,8	27	48,2	10	17,9
[6] Construction	4	7,1	23	41,1	18	32,1	11	19,6
[7] Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	3	5,4	15	26,8	26	46,4	12	21,4
[8] Transportation and Warehousing	2	3,6	22	39,3	27	48,2	5	8,9
[9] Accommodation and Food Service Activities	6	10,7	20	35,7	25	44,6	5	8,9
[10] Information and Communication	4	7,1	8	14,3	24	42,9	20	35,7
[11] Finance and Insurance Activities	6	10,7	11	19,6	29	51,8	10	17,9
[12] Professional, Scientific and Technical Activities	1	1,8	9	16,1	19	33,9	27	48,2
[13] Administrative and Support Service Activities	4	7,1	16	28,6	29	51,8	7	12,5
[14] Education	2	3,6	14	25,0	25	44,6	15	26,8
[15] Culture, Arts, Entertainment, Leisure and Sports	5	8,9	22	39,3	21	37,5	8	14,3
[16] Other Service Activities (e.g: Repair of computers, communication equipment, household goods, clothing, hairdressers, barbershops)	5	8,9	9	16,1	28	50,0	14	25,0

Notes= \*1 respondent did not answer the question on "Agriculture, Forestry and Fishing" sector.

While 78.6% of the participants found the cooperation between enterprises and educational institutions effective, 75% emphasized the importance of career counseling and guidance, and 73.2% saw sector-specific training programs as an effective solution (Table 52).

In general, respondents found sector-specific training programs and career counseling in schools to be largely effective, although a small number indicated that training programs or guidance alone may not be sufficient. This may be because other factors such as low wages, poor working conditions or limited job opportunities may also contribute to the skills gap.

Increasing interaction between enterprises and educational institutions, expanding vocational training and internship opportunities, strengthening career counseling services, and expanding sector-specific training can be priority steps to close the skills gap in Adana.

**Table 52.** Impact of Enterprises on Closing the Talent and Skill Gap in Adana

<b>Question:</b> How effective do you think the following initiatives will be in closing the skills and talent gap in your province?										
<b>Factors</b>	<b>Very Ineffective</b>		<b>Ineffective</b>		<b>Moderately Effective</b>		<b>Effective</b>		<b>Very Effective</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Sector Specific Training Programs	-	-	3	5,4	12	21,4	22	39,3	19	33,9
Cooperation between Businesses and Educational Institutions	-	-	-	-	12	21,4	20	35,7	24	42,9
Enhanced Career Counseling and Guidance in Schools	3	5,4	-	-	11	19,6	16	28,6	26	46,4

### 3.4. Migrant Workers and Employment of People with Disabilities

In order to understand the observations and views of the participants on the employment of migrant workers and people with disabilities in Adana, asked them to answer questions such as **“What is your general perception of migrant worker employment in your organization or province?”**, **“To what extent do the following factors influence decisions on migrant worker employment in your province?”**, **“How do you assess the impact of migrant worker employment on the following factors in your province?”**, **“To what extent do you assess the following challenges faced in migrant worker employment in your province?”**, **“What is your general perception of the employment of people with disabilities in organizations in your province?”**, **“How do you assess the impact**

**of employees with disabilities on the following aspects of organizations in your province?”, “In your opinion, which stage of the recruitment process poses the greatest challenge for organizations when hiring migrant workers?” and “What is your view on the existence of specific policies or strategies to address the challenges faced by organizations in your province in hiring migrant workers?”.**

According to participant views, the perceptions of participants in Adana towards the employment of migrant workers differ. While 37.5% of respondents expressed a neutral view, 35.7% had a negative perception. It can be inferred that while about a quarter of the respondents evaluate the employment of migrant workers positively, some respondents may have adopted a negative attitude due to concerns such as increased competition in the labor market and lower wages. This shows that ambivalence and negative perceptions about the employment of migrant workers are dominant (Table 53).

**Table 53.** General Perception of Migrant Labor Employment in Adana

<b>Question:</b> What is your general perception of migrant labor employment in your organization or province?		
<b>Answers</b>	<b>n</b>	<b>%</b>
Very Positive	2	3,6
Positive	11	19,6
Neither Positive nor Negative	21	37,5
Negative	15	26,8
Very Negative	5	8,9

**Note=** 2 participants did not answer this question.

According to the views of the respondents, the degree of agreement with the factors affecting decisions regarding the employment of migrant workers differs (Table 54) . 53.6% of the respondents found low labor costs **“very influential”**, while 35.7% stated that lower labor costs were **“influential”**. The ability to fill vacancies quickly (35.7% effective, 25% very effective) and the availability of skills not available locally (37.5% effective) are also important factors. Flexibility in work schedules (48.2%) and diversity and inclusion initiatives are other factors influencing the employment of migrant workers. In addition, concerns about cultural and language differences are also an important consideration for employers.

**Table 54.** Factors Affecting Decisions Regarding the Employment of Migrant Workers in Adana

<b>Question:</b> To what extent do the following factors influence decisions regarding the employment of migrant workers in your province?										
Factors	Not Effective at All		Not Effective		Moderately Effective		Effective		Very Effective	
	n	%	n	%	n	%	n	%	n	%
Availability of skills not available locally*	5	8,9	8	14,3	14	25	21	37,5	7	12,5
Lower labor costs	-	-	-	-	6	10,7	20	35,7	30	53,6
High work ethics and reliability	7	12,5	20	35,7	15	26,8	10	17,9	4	7,1
Flexibility in work schedules	3	5,4	10	17,9	16	28,6	18	32,1	9	16,1
Diversity and inclusion initiatives	3	5,4	14	25,0	18	32,1	15	26,8	6	10,7
Ease of filling vacancies quickly	2	3,6	3	5,4	17	30,4	20	35,7	14	25,0
Concerns about cultural or language differences	3	5,4	10	17,9	17	30,4	15	26,8	11	19,6

**Notes=** \*1 of the participants did not answer for this statement.

According to participant views, the impact of migrant workers on team dynamics, productivity levels, innovation and creativity, and workplace culture varies (Table 55). While 55.4% of the participants stated that the impact of migrants on team dynamics was **“neither positive nor negative”**, 19.6% stated that they saw negative effects. In terms of productivity, 35.7% stated that it was **“neither positive nor negative”** and 23.2% stated that there was a negative impact. Regarding innovation and creativity, 48.2% of the participants stated that they did not see any effect, 16.1% stated that they saw positive effects, and 12.5% stated that they saw negative effects. In terms of workplace culture, 44.6% of respondents reported **“neither positive nor negative”** effects, while 30.4% reported negative effects. Cultural differences, language barriers and adaptation processes of migrant workers can create difficulties in teamwork and workplace culture.

**Table 55.** The Impact of Employing Migrant Workers on Institutions in Adana

<b>Question:</b> How do you assess the impact of migrant labor on the following factors in institutions in your province?										
Factors	Very Negative		Negative		Neither Positive nor Negative		Positive		Very Positive	
	n	%	n	%	n	%	n	%	n	%
Team Dynamics and Collaboration	3	5,4	11	19,6	31	55,4	5	8,9	6	10,7

**Table 55.** The Impact of Employing Migrant Workers on Institutions in Adana

Productivity Levels	1	1,8	13	23,2	20	35,7	20	35,7	2	3,6
Innovation and Creativity	7	12,5	11	19,6	27	48,2	9	16,1	2	3,6
Workplace Culture	7	12,5	17	30,4	25	44,6	5	8,9	2	3,6

According to participant views, the biggest challenges in the employment of migrant workers are legal compliance, language barriers and cultural adaptation problems (Table 56). The majority of respondents indicated that language barriers negatively affect business processes (52.1%), while cultural adaptation issues were seen as a significant challenge by 57.1%.

Legal compliance issues are notable, with 58.9% reporting difficulties. Cultural and linguistic differences are a challenge for 55.3% of respondents. Recruitment and training costs are another major challenge, with 43.7% of respondents stating that these processes create extra costs.

The majority reported moderate difficulties in integrating with local staff (37.5%). In summary, language barriers, cultural adaptation and legal compliance stand out as the biggest challenges, while workplace integration and fast filling of vacancies are also important issues.

**Table 56.** Challenges Faced by Organizations Employing Migrant Workers in Adana

<b>Question:</b> Assess the extent to which the following challenges in the employment of migrant workers are experienced by the organizations in your province.										
Factors	No Difficulties at All		Very Few Difficulties		Experiencing Moderate Difficulty		Experiencing Too Much Difficulty		It's a Complete Challenge	
	n	%	n	%	n	%	n	%	n	%
Language or communication barriers*	-	-	7	12,5	19	33,9	21	37,5	8	14,3
Cultural adaptation problems*	1	1,8	3	5,4	19	33,9	21	37,5	11	19,6
Legal or regulatory compliance*	3	5,4	6	10,7	13	23,2	21	37,5	12	21,4
Costs related to recruitment or training*	4	7,1	5	8,9	22	39,3	13	23,2	11	19,6
Workplace integration with local staff*	4	7,1	18	32,1	21	37,5	12	21,4	4	7,1
Ease of filling vacancies quickly*	8	14,3	9	16,1	20	35,7	10	17,9	8	14,3
Concerns about cultural or language differences*	1	1,8	6	10,7	17	30,4	18	32,1	13	23,2

**Notes=** \*1 of the participants did not answer for these statements.

According to participant views, the biggest challenges in the recruitment process of migrant workers in Adana province are identifying and attracting qualified candidates (33.9%) and legal regulations (33.9%) (Table 57). Enterprises face difficulties in finding suitable candidates for migrant workers and complying with legal regulations. In contrast, no major difficulties were reported at the recruitment and training stage (5.4%). Also, the integration of migrant workers into the workplace culture is seen as a significant challenge (26.8%). Overall, there is a need to expand the pool of candidates and improve legal processes to make the recruitment process more efficient.

**Table 57.** Challenges in the Recruitment Process of Migrant Workers

<b>Question:</b> Which stage of the recruitment process do you think poses the biggest challenge for organizations when hiring migrant workers?		
<b>Answers</b>	<b>n</b>	<b>%</b>
Identify and Attract Qualified Candidates	19	33,9
Legislation	19	33,9
Recruitment and Training	3	5,4
Integrating them into Workplace Culture	15	26,8

According to participant views, organizations in Adana province do not have comprehensive policies for recruiting migrant workers. Only 5.4% of respondents indicated that organizations have comprehensive policies. The majority (55.4%) stated that existing policies are limited, while 39.3% stated that there are no policies at all. These results suggest that more effective and systematic policies need to be developed for the integration of migrant workers (Table58).

**Table 58.** Policies and Strategies for the Recruitment Process of Migrant Workers

<b>Question:</b> What is your view on the existence of specific policies or strategies by organizations in your province to address challenges in recruiting migrant workers?		
<b>Answers</b>	<b>n</b>	<b>%</b>
Yes, they have comprehensive policies.	3	5,4
Yes, but the policies are quite limited.	31	55,4
No, they don't have a specific policy.	22	39,3

The general perception of the participants regarding the employment of people with disabilities in the institutions in Adana province shows a largely positive trend (see Table 59). 50% of the participants expressed their views on employment of people with disabilities as **“positive”** or **“very positive”**. However, 25% were undecided and 23.2% expressed negative

views. This indicates that awareness of disability-inclusive employment has improved; however, certain organizations still face challenges and express concerns. Therefore, it is recommended to strengthen information dissemination and incentive mechanisms to enhance the labor force participation of people with disabilities.

**Table 59.** General Perception on Employment of People with Disabilities in Institutions in Adana

<b>Question:</b> What is your general perception regarding the employment of people with disabilities in institutions in your province?		
<b>Answers</b>	<b>n</b>	<b>%</b>
Very Positive	18	32,1
Positive	10	17,9
Neither Positive nor Negative	14	25
Negative	9	16,1
Very Negative	4	7,1

Note= 1 participant did not answer this question.

It is seen that the general perception of the impact of employees with disabilities in the workplace is largely positive in the organizations in Adana province (Table 59). **“Positive”** (35.7%) and **“Strongly positive”** (16.1%) responses about the impact of employees with disabilities on team dynamics and cooperation reach 51.8% in total (Table 60). This result supports the perception that employees with disabilities generally contribute positively to collaboration and team dynamics. However, 35.7% were neutral, saying **“Neither positive nor negative”**, which may indicate that some organizations have not yet clearly seen whether there is a significant impact on this issue. As only 12.5% responded **“Negatively”** or **“Strongly negatively”**, it can be said that there is no general perception that employees with disabilities harm teamwork.

Regarding the impact of employees with disabilities on productivity, 42.9% of the respondents answered **“Positive”** (28.6%) and **“Strongly positive”** (14.3%). This indicates that nearly half of the respondents believe employees with disabilities contribute positively to overall productivity levels. However, 46.4% of the respondents expressed a neutral opinion by saying **“Neither positive nor negative”**. This may suggest that the contribution of employees with disabilities to productivity may vary from workplace to workplace. The low rates of **“Negative”** (7.1%) and **“Strongly negative”** (3.6%) indicate that there is no negative perception in terms of productivity in general.

Regarding the impact of employees with disabilities on innovation and creativity, 62.5% of respondents answered **“Positive”** (48.2%) and **“Strongly positive”** (14.3%). This shows that there is a strong positive perception that employees with disabilities increase innovation and creativity. The rate of **“neither positive nor negative”** responses is 30.4%, which may suggest that some organizations may not have observed this effect yet. The sum of **“Negative”** or **“Strongly negative”** responses is only 7.2%, meaning that the number of people who think that employees with disabilities have a negative impact on creativity is quite low.

Regarding the impact of employees with disabilities on workplace culture, 44.7% of the respondents answered **“Positive”** (28.6%) and **“Strongly positive”** (16.1%). This suggests a generally positive perception regarding the contribution of employees with disabilities to workplace culture. However, the largest proportion of respondents (42.9%) selected **“Neither positive nor negative,”** indicating that many organizations may perceive the impact as neutral. Responses indicating **“Negative”** (8.9%) and **“Strongly negative”** (3.6%) perceptions together total 12.5%, showing that negative views are held by a minority of respondents.

Overall, there is a strong positive perception that employees with disabilities increase creativity at work (62.5%). However, they are also generally considered to make positive contributions in terms of team dynamics (51.8%) and workplace culture (44.7%). Although there are more neutral responses on productivity (46.4%), positive views (42.9%) are much higher than negative views (10.7%). These results suggest that there is a positive perception that employment of people with disabilities contributes to workplaces, but some organizations have not yet clearly observed this effect.

Participant perception about the impact of disabled employees in the workplace is generally positive (Table 60). 51.8% of the participants think that disabled employees contribute positively to teamwork and cooperation. Negative opinions remain low at 12.5%. 42.9% of the respondents stated that employees with disabilities positively affect productivity, while 46.4% remained neutral. The rate of negative opinion is 10.7%. The creative and innovative contributions of employees with disabilities are strongly positively evaluated (62.5%). The contribution of employees with disabilities to workplace culture is also generally viewed positively (44.7%). In general, there is a widespread perception that employees with disabilities contribute positively to their workplaces.

**Table 60.** The Impact of Disabled Employees on the Performance of Organizations in Adana

<b>Question:</b> How do you assess the impact of employees with disabilities on the following aspects of organizations in your province?										
<b>Factors</b>	<b>Very Negative</b>		<b>Negative</b>		<b>Neither Positive Nor Negative</b>		<b>Positive</b>		<b>Strongly Positive</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Team Dynamics and Collaboration	1	1,8	6	10,7	20	35,7	20	35,7	9	16,1
Productivity Levels	2	3,6	4	7,1	26	46,4	16	28,6	8	14,3
Innovation and Creativity	1	1,8	3	5,4	17	30,4	27	48,2	8	14,3
Workplace Culture	2	3,6	5	8,9	24	42,9	16	28,6	9	16,1

### 3.5. Women Labor Force

In order to understand participants' observations and views on the female workforce in Adana, they were asked to respond to the following questions: **“How prevalent do you believe the following skills are in the female workforce in your province”, “To what extent do you think the following factors limit the representation of women in certain occupations in your province?”, and “How critical do you think the following actions are to better support the female workforce and utilize their skills in various occupations?”.**

According to participant views, communication and interpersonal skills (69.6%), creativity and innovation (73.2%), problem solving and critical thinking (62.5%), and adaptability and multitasking (66.1%) are strongly perceived to be common skills of the female workforce in Adana province (see Table 61). Women are considered to be flexible and versatile workers. There are different views on leadership and decision-making, organization and time management. Leadership skills may need to become more widespread. There is a lower perception of the use of technical skills (e.g. coding, data analysis), which may indicate that the female workforce needs more opportunities and training in technical areas. In general, there is a widespread perception that female employees are strong in skills such as communication, creativity, adaptability and problem solving. However, more development and opportunities are perceived to be needed in leadership, decision-making and technical skills.



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According to participant views, male-dominated sectors (80.4%) stand out with the highest rate among the obstacles limiting women's representation in certain professions in Adana province (see Table 62). This reflects the perception that women are underrepresented especially in male-dominated sectors such as science, technology, engineering and construction. Gender discrimination in hiring and promotions (71.4%) is also seen as a significant barrier; women's lack of equal opportunities suggests that hiring and promotion policies need to be made transparent. In addition, the lack of work-life balance policies (69.6%) is also perceived as a factor limiting women's career advancement.

**Table 61.** Female Labor Force Skills in Adana

<b>Question:</b> To what extent do you think the following skills are present among women in the labor market in your province?										
Skills	Strongly Disagree		Disagree		Moderately Agree		Agree		Strongly Agree	
	n	%	n	%	n	%	n	%	n	%
Leadership and Decision Making	2	3,6	10	17,9	24	42,9	9	16,1	11	19,6
Communication and Interpersonal Skills	-	-	-	-	17	30,4	25	44,6	14	25,0
Organization and Time Management	-	-	5	8,9	13	23,2	21	37,5	17	30,4
Creativity and Innovation	-	-	3	5,4	12	21,4	22	39,3	19	33,9
Technical Skills (e.g. Coding, Data Analysis)	1	1,8	13	23,2	19	33,9	13	23,2	10	17,9
Problem Solving and Critical Thinking	-	-	2	3,6	19	33,9	19	33,9	16	28,6
Adaptability and Multitasking	-	-	6	10,7	13	23,2	20	35,7	17	30,4

Barriers perceived as less influential are related to cultural/societal expectations (64.3%) and limited access to education and training in certain fields (64.2%). However, these factors are not seen as dominant as factors such as male-dominated sectors and gender discrimination.

In general, the main barriers to women's representation in occupations are male-dominated sectors, gender discrimination and poor work-life balance policies. Education and societal expectations are also recognized as barriers, but to a lesser extent.



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**Table 62.** Factors Limiting Female Labor Force in Adana

**Question:** To what extent do you think the following factors limit the representation of women in certain occupations in your province?

Actions	Strongly Disagree		Disagree		Moderately Agree		Agree		Strongly Agree	
	n	%	n	%	n	%	n	%	n	%
Cultural or Societal Expectations	1	1,8	3	5,4	16	28,6	20	35,7	16	28,6
Limited Access to Education and Training in Certain Areas	3	5,4	3	5,4	14	25,0	25	44,6	11	19,6
Gender Discrimination in Recruitment and Promotion	1	1,8	4	7,1	11	19,6	19	33,9	21	37,5
Lack of Work-Life Balance Policies	1	1,8	2	3,6	14	25	18	32,1	21	37,5
Male-Dominated Sectors	2	3,6	1	1,8	8	14,3	15	26,8	30	53,6

### 3.6. Technological Change and its Effects on Labor Force

In order to understand the observations and views of the participants in Adana on technological change and its impact on the labor force, asked them **“How do you think new technologies (e.g. artificial intelligence, automation, green technologies) will affect the labor market in your province?”**, **“What types of occupations or areas of expertise do you believe will be most in demand in the next 10 years?”**, **“Please rate the likelihood that each of the following occupations will be in high demand in the future due to technological developments.”**, **“What are the biggest challenges for the labor market to adapt to new technological and industrial developments?”**, **“Which skills do you think are the most critical for workers in the future labor market?”**, **“Do you believe that the private sector in your province is investing enough to prepare the workforce for technological changes?”**, **“Which of the following group(s) do you think would benefit the most from technological developments in the labor market?”**, **“Which group do you think has the highest risk of job loss due to technological developments?”**, **“Which measures should be prioritized to address the impact of technology on the labor market?”**, and **“How ready is your province to respond to changes in the labor market caused by new technologies?”**

Gender-neutral hiring practices (91%) and flexible working hours and childcare support (89.3%) stand out as the most critical factors in supporting the female workforce in Adana (Table 63). The majority of respondents believe that these factors are essential for women to remain in the workforce. In addition, increased access to technical and vocational training programs (75%) is considered critical for women to obtain more jobs. In particular, there is a need to increase training opportunities for women in digital skills and technical fields.

Promoting women to leadership roles (71.4%) is also recognized as an important strategy to empower the female workforce, with policy development needed to encourage women's access to senior management positions. Overall, work-life balance, equal recruitment and increased training opportunities are highlighted as critical factors to ensure stronger female participation in the workforce.

**Table 63.** Factors Limiting Female Labor Force in Adana

<b>Question:</b> How critical do you think the following actions are to better support the female workforce and utilize their skills in various occupations?										
	Not Critical at All		Not Critical		Moderately Critical		Critical		Very Critical	
<b>Factors</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Implement gender neutral recruitment practices	-	-	2	3,6	3	5,4	26	46,4	25	44,6
Offer flexible working hours and childcare support	1	1,8	-	-	5	8,9	14	25	36	64,3
Increase access to technical and vocational training programs	-	-	4	7,1	10	17,9	22	39,3	20	35,7
Promoting women into leadership roles	1	1,8	3	5,4	12	21,4	19	33,9	21	37,5

Uncertainty about the impact of new technologies on the labor market in Adana stands out (see Table 64). 33.9% of respondents assessed the impact of technological changes as **“neither positive nor negative”**. However, the proportion of respondents with a positive view (34%) is slightly higher than those with a negative view (32.1%). While some respondents believe that technological changes will create new job opportunities, others anticipate negative impacts due to job loss and transformation pressures. This finding suggests an optimistic but cautious approach to new technologies.



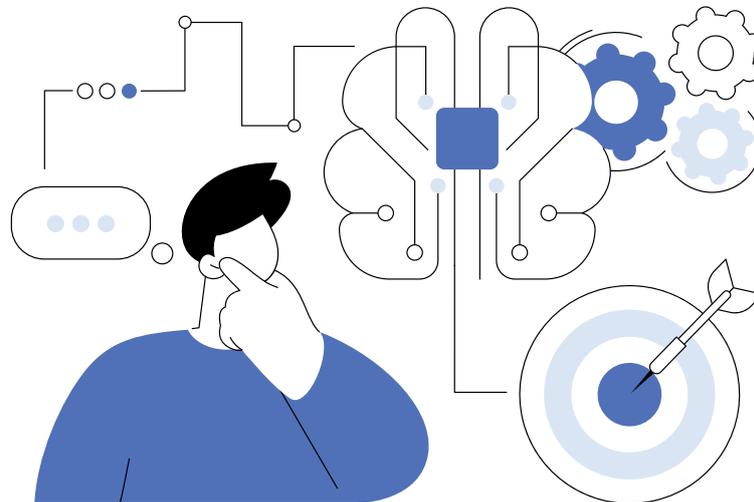
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**Table 64.** Impact of New Technologies on the Labor Market in Adana

Answers	n	%
Strongly Positive	9	16,1
Slightly Positive	10	17,9
Neither Positive nor Negative	19	33,9
Slightly Negative	14	25
Very Negative	4	7,1

Participants predict that the professions that will be most in demand in the future will be focused on digitalization (e-commerce), artificial intelligence, data science and sustainability (Table 65). Artificial intelligence and machine learning experts (47%) and data scientists and cyber security experts (n=29 and n=22 respectively) stand out among the professions that will be most in demand. E-commerce and supply chain professionals are increasingly recognized as a key occupational group due to the impact of digitalization (n=33). In addition, there is a growing demand for expertise in renewable energy and automation technologies—particularly for robotics engineers and automation specialists (n=17), as well as renewable energy technicians (n=16). Digital-oriented professions such as digital marketing and social media specialists (n=13 and n=9) will also gain importance in the future. Healthcare professionals (n=4), on the other hand, have a lower rate among the professions that will be in demand in the future. These findings point to a labor market where digital transformation and sustainability-based professions will come to the fore.





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**Table 65.** Occupations or Specialties that will be in the Highest Demand in 10 Years

<b>Question:</b> What professions or specialties do you believe will be most in demand in the next 10 years?	
<b>Profession or Specialization</b>	<b>Number of Markings</b>
[1] E-Commerce and Supply Chain Expert	33
[2] Animation	7
[3] R&D	18
[4] Artificial Intelligence and Machine Learning Experts	47
[5] Data Scientists and Data Analysts	29
[6] Cyber Security	22
[7] Renewable Energy Technicians (e.g. solar panel installers, wind turbine technicians)	16
[8] Software Developers and Engineers	20
[9] Healthcare workers (e.g. nurses, doctors, medical technicians)	4
[10] Digital Marketing Experts	13
[11] Crafts (e.g. electricians, plumbers, welders)	8
[12] Educators and Trainers in Technology and Digital Skills	6
[13] Information Security Specialist	14
[14] Computer Games Programmer	9
[15] Cloud Computing Specialist	8
[16] Environmental Scientists and Sustainability Consultants	5
[17] Financial Analysts and FinTech Experts	2
[18] Robotics Engineers and Automation Specialists	17
[19] Social Workers and Counselors	3
[20] Digital Forensics Expert	3
[21] Social Media Specialist	9
[22] Micro Process Designer	5
[23] Enterprise Resource Planning Specialist	1

**Notes** = Respondents marked more than 1 occupation and specialization.

Participants selected the professions where technological advances are likely to be most in demand in the labor market (Table 66). Robotics engineers, artificial intelligence and machine learning experts, and data scientists and cyber security experts stand out as the most critical areas. E-commerce and supply chain specialists (71.4%) are seen as an important occupational group with the increasing impact of digital trade. Renewable energy technicians (66.1%) and sustainability and automation technologies will increase in demand. Digital marketing specialists (57.1%) and social media specialists (46.4%) will also

have critical skills in a digitalized world. Healthcare workers (30.4%) and craft occupations (19.6%) have a lower demand forecast, but digital innovations in the healthcare sector could change this. Overall, occupations focused on digitalization and sustainability are expected to be at the forefront in the future.

**Table 66.** Demand Probability of Occupations According to Technological Developments

**Question:** Please assess the likelihood that each of the following occupations will be in high demand in the future due to technological developments.

Profession or Specialization	Moderately Critical		Critical		Very Critical	
	n	%	n	%	n	%
[1] E-commerce and Supply Chain Expert	-	-	16	28,6	40	71,4
[2] Animation Programmer	10	17,9	20	35,7	26	46,4
[3] R&D Personnel	2	3,6	25	44,6	29	51,8
[4] Artificial Intelligence and Machine Learning Experts	-	-	5	8,9	51	91,1
[5] Data Scientists and Data Analysts .	1	1,8	6	10,7	49	87,5
[6] Cyber Security Experts	2	3,6	10	17,9	44	78,6
[7] Renewable Energy Technicians (e.g. solar panel installers, wind turbine technicians)	2	3,6	17	30,4	37	66,1
[8] Software Developers and Engineers	1	1,8	7	12,5	48	85,7
[9] Healthcare workers (e.g. nurses, doctors, medical technicians)	13	23,2	26	46,4	17	30,4
[10] Digital Marketing Experts	4	7,1	20	35,7	32	57,1
[11] Crafts (e.g. electricians, plumbers, welders)	20	35,7	25	44,6	11	19,6
[12] Educators and Trainers in Technology and Digital Skills	3	5,4	18	32,1	35	62,5
[13] Information Security Specialist	2	3,6	13	23,2	41	73,2
[14] Computer Games Programmer	8	14,3	17	30,4	31	55,4
[15] Cloud Computing Specialist	3	5,4	15	26,8	38	67,9
[16] Environmental Scientists and Sustainability Consultants	4	7,1	23	41,1	29	51,8
[17] Financial Analysts and FinTech Experts	6	10,7	18	32,1	32	57,1
[18] Robotics Engineers and Automation Specialists	2	3,6	7	12,5	47	83,9
[19] Social Workers and Counselors	16	28,6	26	46,4	14	25
[20] Digital Forensics Expert	5	8,9	25	44,6	26	46,4
[21] Social Media Specialist	10	17,9	20	35,7	26	46,4
[22] Micro Process Designer	5	8,9	19	33,9	32	57,1
[23] Enterprise Resource Planning Specialist	9	16,1	31	55,4	16	28,6

Lack of skilled labor and limited access to education and training are seen as significant barriers (Table 67). Lack of skilled labor (n= 38) and limited access to education and training (n= 28) are among the major challenges that employees face in adapting to new technologies according to respondents. In particular, the low number of employees with sufficient knowledge and skills to adapt to new technologies can hinder the effective implementation of these developments. Limited training opportunities can make this process even more difficult.

Resistance to change in organizations (n=36) is another major barrier to adapting to technological and industrial developments. Employees and managers may be accustomed to existing ways of doing business and may be hesitant to change. This can create a psychological barrier that makes the integration of new technologies difficult.

Lack of infrastructure (n=35) was considered by respondents as another important barrier limiting the applicability of technological innovations. Especially in some sectors, insufficient physical and digital infrastructure can hinder the effective integration of new technologies.

As shown in Table 67 below, in response to the question “What are the biggest challenges faced by the labor market in adapting to new technological and industrial developments?”, respondents identified high costs as the primary obstacle. The high costs of adopting new technologies (n=47) stand out as the most important obstacle. This is thought to emphasize the financial barriers faced by companies that will transition to technology and the necessity of infrastructure investments. For businesses, investing in technological innovations can be costly in the short term, making it difficult to adopt them widely.

High costs (n=47) stand out as the biggest challenge for the labor market to adapt to new technological and industrial developments (Table 67). This reflects the financial challenges of infrastructure investments in technological innovation. Lack of skilled labor (n=38) and limited access to training (n=28) are also significant barriers, highlighting the inability of employees to adapt to new technologies. Resistance to change within organizations (n=36) and infrastructure deficiencies (n=35) represent other psychological and physical barriers to technological transformation. These findings suggest that the process of technological change in the labor market is shaped by financial and educational challenges.

**Table 67.** Challenges in Adapting to New Technological and Industrial Developments

<b>Question:</b> What are the biggest challenges for the labor market to adapt to new technological and industrial developments?	
<b>Answers</b>	<b>Number of Marks</b>
Lack of skilled labor force	38
Limited to education and training	28
Resistance to change in organizations	36
High costs of adopting new technologies	47
Lack of infrastructure	35
<b>Notes =</b> Participants selected more than 1 option.	

Among the most critical skills for success in the future labor market, technological competence is at the forefront (Table 68). Technical expertise in emerging technologies (n=51), digital literacy (n=39) and problem solving (n=36) skills are the most emphasized areas. In addition to technological skills, communication skills (n=29) are also seen as an important factor. Critical thinking (n=24) was considered a critical skill for employees to cope with the challenges they face. These findings emphasize the importance of developing technological and communicative skills in a balanced way in the labor market.

**Table 68.** Most Critical Skills for Employees in the Future Labor Market

<b>Question:</b> Which skills do you think are the most critical for workers in the future labor market?	
<b>Skills</b>	<b>Number of Marks</b>
Digital Literacy	39
Problem Solving	36
Critical Thinking	24
Communication Skills	29
Technical Expertise in Emerging Technologies	51
<b>Notes =</b> Participants selected more than 1 option.	

It is clearly shown that the private sector in Adana province is insufficient in preparing its workforce for technological changes (Table 69). 89.3% of the respondents think that the private sector does not invest enough in this area, which reveals a serious deficiency in the technological transformation process.

**Table 69.** Investments of the Private Sector in Adana in Preparing the Labor Force for Technological Changes

<b>Question:</b> Do you believe that the private sector in your province is investing enough to prepare its workforce for technological changes?		
Options	n	%
Yes	6	10,7
No	50	89,3

Respondents think that entrepreneurs (41.1%) and highly skilled workers (37.5%) benefit the most from technological developments (Table 70). In contrast, only 5.4% of low-skilled workers are projected to benefit from these developments. This finding highlights that low-skilled workers may be disadvantaged in the digital transformation process and the importance of reskilling programs

**Table 70.** Groups that can Benefit from Technological Developments

<b>Question:</b> Which of the following group(s) do you think would benefit the most from technological developments in the labor market?		
Options	n	%
Highly Skilled Workers	21	37,5
Low-Skilled Workers	3	5,4
Middle Managers	9	16,1
Entrepreneurs	23	41,1

Respondents indicated that the groups most at risk of job loss due to technological developments are older workers (46.4%) and low-skilled workers (39.3%) (Table 71). This finding suggests that groups that have difficulty adapting to digital transformation may be disadvantaged in the labor market.

**Table 71.** Highest Likelihood of Job Loss due to Technological Developments

<b>Question:</b> Which group do you think is most at risk of job loss due to technological advances?		
<b>Options</b>	<b>n</b>	<b>%</b>
Low-Skilled Workers	22	39,3
Mid-Career Professionals	8	14,3
Older Workers	26	46,4

To manage the impact of technological transformation on the workforce, respondents most frequently recommend expanding education and skills acquisition programs (see Table 72). This is followed by sectoral incentives and government-supported employment programs. Strengthening cooperation between enterprises and educational institutions and promoting lifelong learning initiatives are also seen as important. These findings suggest that the combination of individual skills development with institutional and government-sponsored strategies is critical.

**Table 72.** Measures to Address the Impact of Technology on the Labor Market

<b>Question:</b> Which measures should be prioritized to address the impact of technology on the labor market?	
<b>Options</b>	<b>Number of Marks</b>
Expansion of training and upskilling programs	55
Providing incentives for sectors to adopt technology responsibly	54
Strengthening cooperation between businesses and educational institutions	52
State-led employment support programs	53
Promoting lifelong learning initiatives	52

**Notes** = Participants selected more than 1 option.

Adana is not sufficiently prepared for technological changes (Table 73). 51.8% of the participants stated that the province was not prepared at all, while 46.4% stated that it was somewhat prepared. Only 1.8% think that they are fully prepared. These findings indicate that more investment and strategic planning is needed to adapt to technological transformation.



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**Table 73.** Readiness for Changes in the Labor Market Caused by New Technologies

Options	n	%
Very Prepared	1	1,8
A Little Prepared	26	46,4
Not Prepared at All	29	51,8

### 3.7. Sectoral and Regional Labor Dynamics

In order to understand the observations and views of respondents in Adana on sectoral and regional labor force dynamics, asked them **“How do you assess the impact of the following factors on the development of sectors in your province?”**, **“Do you believe that cultural factors (such as traditions, local preferences or heritage) are more influential than economic factors (such as investments, policy or market demand) in the prominence or decline of sectors in your region?”**, **“Which sectors do you think are currently facing the most significant talent and skills shortages?”**, **“Which sectors in your province do you think will have high demand for labor ?”**, and **“Which sectors in your province are most likely to be affected by technological developments?”**.

The most influential factors in the development of sectors in Adana are investment in regional infrastructure, changes in consumer demand, labor skills and migration trends (Table 74). Government incentives and the availability of natural resources are also considered important, while the impact of cultural heritage and traditions is found to be more limited. These findings suggest that infrastructure, education and migration policies should be prioritized for economic growth and sustainable development.



**Table 74.** Factors that may Affect the Development of Sectors in Adana

**Question:** How do you assess the impact of the following factors on the development of sectors in your province?

Statements	Strongly Disagree		Disagree		Moderately Agree		Agree		Strongly Agree	
	n	%	n	%	n	%	n	%	n	%
Cultural heritage or traditions specific to the region	1	1,8	10	17,9	19	33,9	18	32,1	8	14,3
Availability or scarcity of natural resources	2	3,6	10	17,9	13	23,2	25	44,6	6	10,7
Government incentives	1	1,8	4	7,1	17	30,4	21	37,5	13	23,2
Changes in local or international consumer demand	-	-	4	7,1	13	23,2	32	57,1	7	12,5
Investing in regional infrastructure and development	1	1,8	5	8,9	12	21,4	29	51,8	9	16,1
Labor skills and education levels	1	1,8	1	1,8	10	17,9	26	46,4	18	32,1
Migration trends (e.g. rural urban or international migration)	1	1,8	4	7,1	8	14,3	28	50,0	15	26,8

The majority of respondents (60.7%) think that economic factors are more determinant than cultural factors in the development of sectors in the region (Table 75). However, 30.4% stated that both factors are equally influential. These findings indicate that although economic factors are at the forefront, cultural factors should not be completely ignored.

**Table 75.** Cultural and Economic Factors in the Promotion or Decline of Sectors in the Region

**Question:** Do you believe that cultural factors (such as traditions, local preferences or heritage) are more influential than economic factors (such as investments, policy or market demand) in the promotion or decline of sectors in your region?

Answers	n	%
Yes, cultural factors are more influential	-	-
No, economic factors are more influential	34	60,7
Both are equally effective	17	30,4
I'm not sure	3	5,4

**Note=** 2 participants did not answer this question.

In Adana province, the largest skills shortages are observed in manufacturing (32 marks), professional, scientific and technical activities (28 marks) and agriculture, forestry and fishing (19 marks) sectors (Table 76). These findings indicate that there is a serious skills shortage, especially in areas requiring technical knowledge and expertise.

**Table 76.** Adana Sectoral Talent and Skill Gap

<b>Question:</b> Which sectors do you think are currently facing the most significant talent and skills shortages? (You can choose more than one option)	
<b>Sectors</b>	<b>Number of Markings</b>
[1] Agriculture, Forestry and Fisheries	19
[2] Mining and Quarrying	8
[3] Manufacturing	32
[4] Electricity, Gas, Steam and Air Conditioning Production and Distribution	12
[5] Water Supply; Sewerage, Waste Management and Improvement Activities	15
[6] Construction	9
[7] Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	9
[8] Transportation and Warehousing	8
[9] Accommodation and Food Service Activities	4
[10] Information and Communication	18
[11] Finance and Insurance Activities	14
[12] Professional, Scientific and Technical Activities	28
[13] Administrative and Support Service Activities	11
[14] Education	16
[15] Culture, Arts, Entertainment, Leisure and Sports	8
[16] Other Service Activities (e.g: Repair of computers, communication equipment, household goods, clothing, hairdressers, barbershops)	15

**Notes =** Respondents marked more than 1 for the sectors with the most significant skills and skill gaps in Adana province.



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The sectors that are expected to have the highest labor demand in Adana province are Manufacturing (44 marks), Information and Communication (33 marks), Professional, Scientific and Technical Activities (33 marks) and Agriculture, Forestry and Fishing (28 marks) (Table 77). These findings reveal high employment expectations especially in technical fields such as information technologies and engineering, as well as adaptation to technological developments and industry-based labor demands.

**Table 77.** Sectors with High Labor Demand in Adana

<b>Question:</b> Which sectors in your province do you think will have high labor demand?	
<b>Sectors</b>	<b>Number of Markings</b>
[1] Agriculture, Forestry and Fisheries	28
[2] Mining and Quarrying	12
[3] Manufacturing	44
[4] Electricity, Gas, Steam and Air Conditioning Production and Distribution	20
[5] Water Supply; Sewerage, Waste Management and Improvement Activities	13
[6] Construction	26
[7] Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	23
[8] Transportation and Warehousing	14
[9] Accommodation and Food Service Activities	18
[10] Information and Communication	33
[11] Finance and Insurance Activities	18
[12] Professional, Scientific and Technical Activities	33
[13] Administrative and Support Service Activities	23
[14] Education	27
[15] Culture, Arts, Entertainment, Leisure and Sports	16
[16] Other Service Activities (e.g: Repair of computers, communication equipment, household goods, clothing, hairdressers, barbershops)	26

**Notes** =Participants marked more than 1 sector.

As seen in Table 78 below, according to the findings on which sectors in Adana province are most likely to be affected by technological developments, the sectors in Adana province that are most likely to be affected by technological developments are: Information and communication sector (39 marks), Manufacturing sector (38 marks), Professional, Scientific and Technical Activities (35 marks), and Education sector (35 marks). These results indicate that factors such as technological infrastructure and digitalization will have a significant impact on these sectors.

According to Table 78, the sectors in Adana most likely to be affected by technological developments are Information and Communication (39 responses), Manufacturing (38), Professional, Scientific and Technical Activities (35), and Education (35). These findings show that investments in digitalization, automation and technological infrastructure can create a significant transformation in these sectors. While the Information and Communication sector is inherently one of the most sensitive to technological developments, the spread of automation and artificial intelligence-supported production processes in the manufacturing sector is seen as the main driver of change.

**Table 78.** Adana Sectors' Likelihood of Being Affected by Technological Developments

<b>Question:</b> Which sectors in your province are most likely to be affected by technological developments?	
<b>Sectors</b>	<b>Number of Markings</b>
[1] Agriculture, Forestry and Fisheries	23
[2] Mining and Quarrying	9
[3] Manufacturing	38
[4] Electricity, Gas, Steam and Air Conditioning Production and Distribution	20
[5] Water Supply; Sewerage, Waste Management and Improvement Activities	16
[6] Construction	16
[7] Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	17
[8] Transportation and Warehousing	19
[9] Accommodation and Food Service Activities	16
[10] Information and Communication	39
[11] Finance and Insurance Activities	29
[12] Professional, Scientific and Technical Activities	35
[13] Administrative and Support Service Activities	25
[14] Education	35
[15] Culture, Arts, Entertainment, Leisure and Sports	11
[16] Other Service Activities (e.g: Repair of computers, communication equipment, household goods, clothing, hairdressers, barbershops)	19
<b>Notes =</b> Respondents marked more than 1 sector.	

### 3.8. Links between Education and Employment

In order to understand the observations and views of the participants in Adana on the “links between education and employment”, they were asked to respond to the questions “To what extent are the current education and training programs in your province effective in preparing workers for technological and industrial developments?” and “To what extent are the following roles of universities and career centers in your province important in helping people adapt to new technologies in the labor market?”.

According to the opinions of the participants, the current education and training programs in Adana province are generally perceived to be moderately effective in preparing employees for technological and industrial developments (Table 79). While 48.2% of the participants evaluated the programs as moderately effective, 21.4% stated that they were not effective and 3.6% stated that they were not effective at all. This indicates that the training programs need to be revised, updated and developed to better cover technology-oriented skills.

The fact that 17.9% found the programs effective and only 7.1% found them very effective emphasizes the need to make the existing programs more applied, innovative and in line with sectoral needs.

**Table 79.** The Effect of Existing Education and Training Programs in Adana on Preparing Employees for Technological and Industrial Developments

<b>Question:</b> To what extent are the current education and training programs in your province effective in preparing workers for technological and industrial developments?		
<b>Answers</b>	<b>n</b>	<b>%</b>
Very Effective	4	7,1
Effective	10	17,9
Moderately Effective	27	48,2
Not Effective	12	21,4
Not Effective at All	2	3,6
<b>Note=</b> 1 participant did not answer this question.		



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The findings from the respondents on the role of universities and career centers in helping people adapt to new technologies show that universities and career centers play a critical role in adapting to technological and industrial developments and that more efforts are needed in this regard (Table 80). The majority of respondents indicated that it is crucial for these institutions to offer training programs for emerging technologies, integrate industry focused curricula to align with labor market demands, and provide hands-on opportunities through sectoral partnerships. In addition, programs that promote digital literacy, soft skills and lifelong learning are seen as an important need by respondents.

**Table 80.** The Role of Universities and Career Centers in People's Adaptation to New Technologies

<b>Question:</b> How important are the following roles of universities and career centers in your province in helping people adapt to new technologies in the job market?										
Options	It doesn't Matter at All		Not Important		Moderately Important		Important		Very Important	
	n	%	n	%	n	%	n	%	n	%
Offer training programs in emerging technologies (e.g. artificial intelligence, blockchain, cyber security)	-	-	2	3,6	15	26,8	20	35,7	19	33,9
Integrate hands-on, industry oriented curricula to align with labor market demands.	-	-	1	1,8	14	25	21	37,5	20	35,7
Facilitate partnerships with industries for internships, apprenticeships and research opportunities	-	-	3	5,4	12	21,4	23	41,1	18	32,1
Provide career counseling to help students and job seekers understand evolving labor market trends	-	-	1	1,8	14	25,0	25	44,6	16	28,6
Promote lifelong learning and professional development through certificates and online courses	-	-	3	5,4	18	32,1	23	41,1	12	21,4
Creating specialized centers focused on innovation and entrepreneurship	-	-	1	1,8	15	26,8	21	37,5	19	33,9
Improving digital literacy and soft skills training (e.g. teamwork, problem solving)	-	-	2	3,6	16	28,6	21	37,5	17	30,4
Conducting regular labor market analyses to identify skills and sectors in high demand	-	-	1	1,8	12	21,4	19	33,9	24	42,9

### 3.9. Recruitment Processes and Challenges

In order to understand the observations and views of the participants in Adana on “recruitment processes and challenges”, asked them “How often do you have difficulty finding candidates with the required technical skills?”, “What do you think is the biggest challenge faced by organizations in your province during recruitment?”, “In which areas do you think there is a skills gap among job applicants in your province?”, “How do you perceive the impact of economic conditions in your province on the recruitment process?”, and “How important do you see diversity and inclusion in improving organizational performance?”.

Difficulties in finding candidates with technical skills constitute an important problem in the labor market in Adana (Table 81). While 55.4% of the respondents answered “we usually have difficulties”, 14.3% said “we always have difficulties”. This highlights a shortage of technically skilled individuals in the labor market, posing significant challenges for employers in finding qualified candidates. Increasing training programs and skill development opportunities, as well as creating curricula that focus on technical skills in line with the needs of the sector can be important steps to solve this problem.

**Table 81.** Degree of Difficulty in Reaching Individuals with Technical Skills

Question: How often do you have difficulty finding candidates with the required technical skills?		
Options	n	%
We have No Difficulty	-	-
We are Rarely Challenged	2	3,6
Sometimes We Struggle	15	26,8
We Often Struggle	31	55,4
We Always Struggle	8	14,3

Organizations in Adana face the lack of qualified candidates as the biggest challenge in recruitment processes (Table 82). 66.1% of respondents cited this as the biggest challenge. This suggests that the education system, vocational training programs and sector-specific skills development opportunities may not be sufficient or that the demand for qualified employees is too high. Strategic interventions in the labor market are needed to address this challenge.

**Table 82.** Difficulties Encountered During Recruitment

<b>Question:</b> What do you think is the biggest challenge faced by organizations in your province during recruitment?		
<b>Options</b>	<b>n</b>	<b>%</b>
[1] Recruitment Processes	8	14,3
[2] High Competition for Skilled Workers	11	19,6
[3] Lack of Qualified Candidates	37	66,1

According to the participants' views, the most common skills gaps among job applicants in the labor market in Adana province are technical skills and critical thinking, problem solving and digital competencies (Table 83). Technical skills and critical thinking is the most marked category (40 marks), indicating that candidates lack technical competence and analytical thinking. This may indicate that there are difficulties in developing the skills needed by those working in the industrial, engineering and manufacturing sectors. In addition, there is a deficiency in problem solving and critical thinking (28 marks), which means that candidates also lack analytical thinking and problem solving skills. With the acceleration of digitalization, the lack of IT-related skills (29 marks) is also emerging as a major problem. These findings suggest that employers expect employees with not only professional knowledge but also skills such as analytical thinking, communication and use of technology.

**Table 83.** Skill Gap Among Job Applicants

<b>Question:</b> In which areas do you think there are the most common skills gaps among job applicants in your province?	
<b>Options</b>	<b>Number of Marks</b>
Technical Skills and Critical Thinking	40
Communication Skills	26
Leadership or Management	20
Problem Solving and Critical Thinking	28
Customer Service Skills	12
Digital or IT-related Skills	29

**Notes =** Participants selected more than 1 option.

It is clear that the economic conditions in Adana have a strong impact on recruitment processes (Table 84). 85.8% of the respondents indicated that economic conditions severely affected their recruitment processes. This may indicate that economic uncertainties

shape businesses' hiring decisions and fluctuations put a direct pressure on employment. Employers may adjust their wage policies and headcount according to economic conditions. 14.3% of the respondents stated that they think that economic factors are influential in the recruitment process but do not play a decisive role. In this case, it can be said that businesses are able to maintain recruitment despite economic fluctuations. In the survey results, no one stated that economic conditions had “little” or “no” effect on the recruitment process, which suggests that employers shape their recruitment processes largely according to economic factors and that employment may be entirely dependent on economic conditions.

**Table 84.** Impact of Economic Conditions on the Recruitment Process

<b>Question:</b> How do you perceive the impact of economic conditions in your province on the recruitment process?		
<b>Options</b>	<b>n</b>	<b>%</b>
It Affects Completely	24	42,9
It has a Major Impact	24	42,9
Moderate Impact	8	14,3
Little Effect	-	-
No Effect at All	-	-

According to participant views, the importance of diversity and inclusion on organizational performance is widely recognized (Table 85). 69.6% of the respondents indicated that diversity and inclusion contribute to organizational success with the responses “**Important**” (33.9%) and “**Strongly important**” (35.7%). This may suggest that diversity and inclusion may play a critical role in factors such as employee engagement, workplace cohesion and problem-solving skills. The 28.6% who indicated that it is moderately important acknowledge that these factors contribute to organizational performance, but may believe that other factors are more decisive. However, the percentage of respondents who consider the impact of diversity and inclusion on organizational performance to be low is quite low (1.8%). No one selected “**Not at all important**”, suggesting that diversity and inclusion has become too important an issue in business to be ignored. In general, it is understood that diversity and inclusion are seen as important for organizational performance in the business world and that this understanding is increasingly being adopted.

**Table 85.** Diversity and Inclusion in Improving Organizational Performance

<b>Question:</b> How important do you see diversity and inclusion in improving organizational performance?		
<b>Options</b>	<b>n</b>	<b>%</b>
It doesn't matter at All	-	-
Less Important	1	1,8
Moderately Important	16	28,6
Important	19	33,9
Very Important	20	35,7

In the light of the data obtained within the scope of the survey, labor supply and demand imbalances in Adana, sector-based labor shortages and employment expectations are detailed. For a more in-depth interpretation of the survey data, the next section will focus on the analysis of the stakeholder interviews conducted as part of the fieldwork.

### 3.10. Highlights of the Survey Analysis - Adana

#### 1. Labor Market Analysis

The labor market in Adana is experiencing a downward trend in job opportunities due to economic difficulties, while the demand for skilled labor is increasing in certain sectors. Lack of sectoral innovation, inadequate vocational training and job shifts to other regions are cited as the most important reasons for the decline in employment.

#### 2. Labor Demand and Qualified Personnel Shortage

Incentives, changes in consumer behavior, regional economic growth and the need for skilled labor are the main drivers of labor demand in Adana. While there is a shortage of skilled labor in the manufacturing, finance, agriculture and tourism sectors, it is recommended that training programs be updated and university-industry collaborations be increased to close this gap.

#### 3. Employment of Migrant Workers and People with Disabilities

Perceptions of the employment of migrant workers in Adana vary, with advantages such as low labor costs and the ability to fill vacancies quickly coming to the fore, while language barriers, cultural adaptation issues and legal regulations are seen as the biggest challenges. Employment of people with disabilities is generally evaluated positively.



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#### 4. Female Labor Force

Strengths in the female workforce include communication and interpersonal skills, creativity and innovation, problem solving and critical thinking, and adaptability and multitasking skills. The biggest obstacles are seen as male-dominated sectors and gender discrimination in recruitment and promotion. Gender-neutral hiring practices, flexible working hours and childcare support policies are suggested as solutions.

#### 7. Linkages between Education and Employment

Education and training programs in Adana were generally found to be moderately effective in preparing workers for technological and industrial developments, and participants emphasized the need to make programs more applied and innovative.

#### 5. Technological Change and Effects on Labor Force

Robotics engineers, artificial intelligence and machine learning specialists, data scientists and cybersecurity experts are seen as the professions that will be most in demand in the future.

#### 8. Recruitment Processes and Challenges

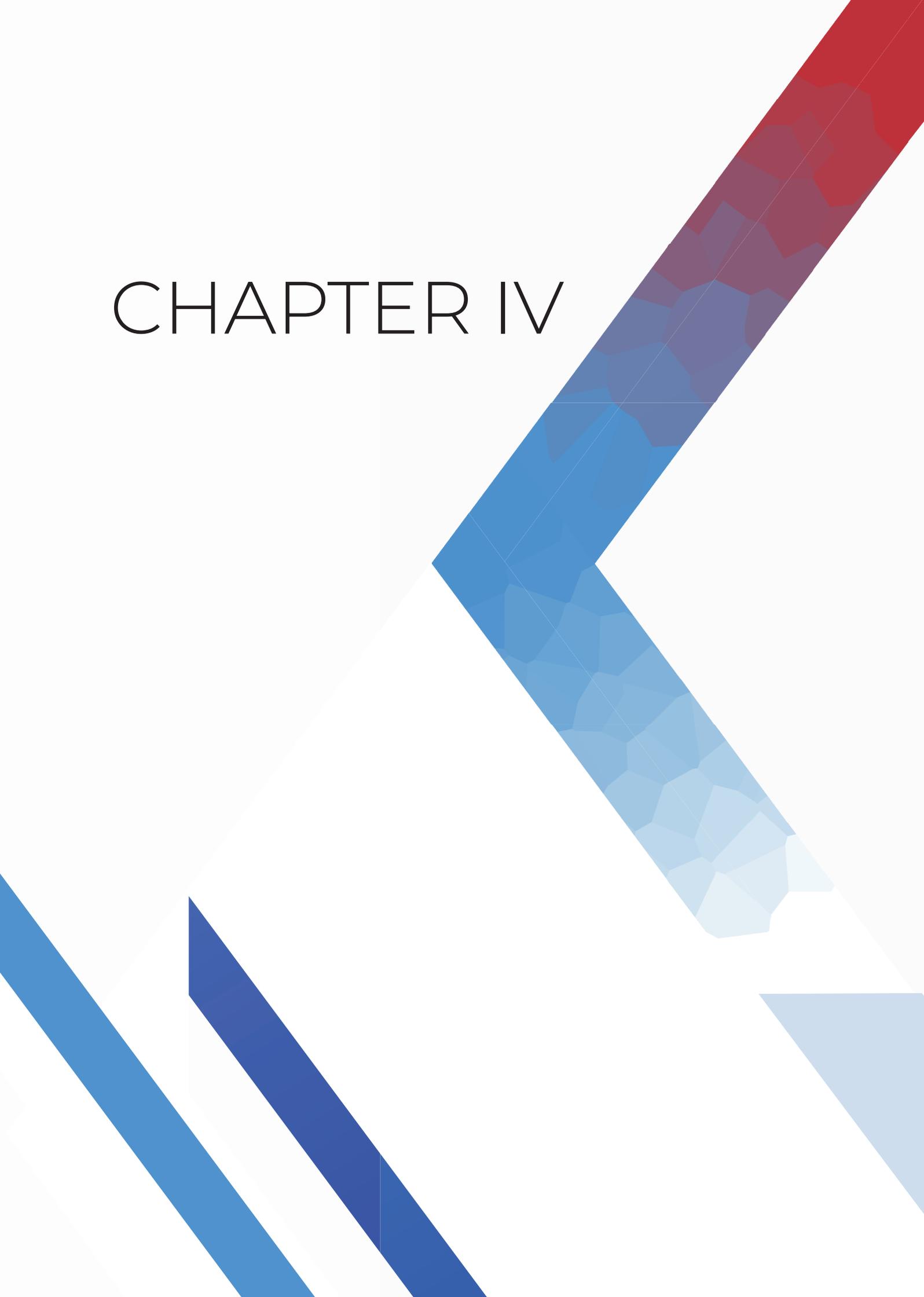
Technical skills and critical thinking, problem solving and digital competencies are among the most gaps. It is emphasized that diversity and inclusion improve organizational performance.

#### 6. Sectoral and Regional Labor Dynamics

The development of sectors is mostly affected by investment in regional infrastructure, changes in consumer demand, labor skills and migration trends. The highest labor demand is projected to be in the manufacturing sector.



# CHAPTER IV





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# CHAPTER IV

## 4. QUALITATIVE ANALYSIS OF LABOR MARKET, ECONOMIC STRUCTURE AND MIGRATION DYNAMICS IN ADANA

This section first provides general information on the procedures followed during the qualitative data collection phase of the fieldwork conducted on December 22 and 24, 2024, the stakeholders interviewed and the research team.

### 4.1. Methodology of Qualitative Interviews

During the three-day Adana fieldwork on 22 and 24 December 2024, semi-structured interviews were conducted with focal people in the institutions as a qualitative data collection tool. These interviews were recorded with the consent of the participants through voice recorders and consent documents were signed by the participants. Between 1 and 7 focal people from the interviewed institutions participated in the semi-structured interviews.

Interviews were conducted with a total of 35 participants from stakeholder organizations. Interviews lasted between 45 - 75 minutes. The main purpose of these interviews with stakeholder participants was to facilitate the transition of target groups to the labor market and to achieve social cohesion goals. The interviews were audio transcribed and analyzed using MAXQDA qualitative data analysis software. The thematic headings that emerged as a result of the analysis are as follows:

- General Sectoral Situation: Potential capacity and opportunities in terms of employment,
- Sectors with Labor Shortages,
- Labor Force Qualifications and Supply-Demand Matching,
- Women's Participation in the Labor Market: Opportunities and Constraints,
- Employers' Attitudes towards Migrant Labor and Market Dynamics,
- Barriers to Migrants' Transition to the Formal Labor Market,
- The Effects of Their Possible Return on the Labor Market,
- Inter-institutional Communication in Transition to the Labor Market

In the following sections, which are organized according to these thematic headings, the different sub-components of each theme are examined in detail.

## 4.2. General Sectoral Situation: Potential Capacity in terms of Employment and Opportunities

Adana has a balanced economic structure across the agriculture, industry, and services sectors, offering diverse employment opportunities in the labor market. The high occupancy rates in Organized Industrial Zones and the emergence of new sectors contribute to regional economic dynamism by increasing labor demand. While large-scale companies stand out in the textile sector, areas such as modern greenhouse farming and organic agriculture in agricultural production open new employment opportunities. Thanks to its geographical location and logistics infrastructure investments, Adana is becoming an important hub for international trade and transportation. Strengthening cooperation and effective planning for new sectors will contribute to increasing the registered employment rate.

In this section, Adana's sectoral structure is examined and its impact on the labor market and potential capacity and opportunities in terms of employment are assessed. Adana stands out as a city with a balanced development between agriculture, industry, trade and services sectors in terms of its economic structure. Findings studies reveal that industrialization has a history of more than a hundred years in Adana, and today the Adana Organized Industrial Zone has reached 100 percent occupancy rate. According to SSI data, there are 370,000 registered labor force in the city and employment is mainly concentrated in agriculture, industry and trade sectors. It is reported that the OIZ is based on main sectors such as food, chemicals, plastics, textiles and metals, but that new specialized OIZs are in the process of being established in areas such as energy, chemicals, agriculture-based greenhouses and aquaculture.

Although the industrial sector in general shows a steady development, the textile sector exhibits a mobility outside of this stability. Adana is home to enterprises that produce for global fashion groups. Although the predominant view is that the textile industry will remain strong, it is noted that small-scale textile firms have withdrawn from the market over time and have been replaced by larger firms located in the OIZ. In terms of labor demand, there is a consensus that the highest need is in the textile industry.

Adana's geographical location is another advantageous factor in the development of the labor market. The city is located at the intersection of the north-south and southeast trade



routes and is connected to international markets through Mersin Port. The new container port project, which is in the planning phase, the Port of Iskenderun and small ports in the surrounding area increase the region's maritime trade capacity. The opening of Çukurova Airport makes Adana an important center for cargo transportation, while the restructuring of railway lines to pass through logistics factories also contributes to industrial and commercial activities.

While Adana's agricultural sector has a traditional place in the city's economy, changing production patterns are creating new opportunities. With the spread of modern greenhouse cultivation, banana production is no longer limited to Anamur, but is now also being realized in Adana. There is growing interest in growing crops such as avocado, passion fruit and blueberries, while in the northern regions, organic agriculture and small ruminant farming are among the most prominent potential areas. This transformation in agricultural production is also diversifying the need for labor. While the development of the agriculture-based food industry presents an important opportunity for Adana's economy, the limited automation of this sector creates employment for unskilled and semi-skilled labor.

Overall, Adana's economy is resilient to economic fluctuations thanks to its sectoral diversity and balanced structure. Employment opportunities that appeal to a labor force with different qualifications are seen as an important factor that facilitates the transition to the labor market. The transformations in the agriculture, industry and service sectors show that Adana's labor market is in constant change. While the traditionally strong agricultural sector has increased the demand for unskilled labor in areas such as fruit harvesting, its expansion into organic farming and animal husbandry further increases its employment potential.

Industrial investments in the region, especially with the expansion of organized industrial zones, allow for an increase in the formal employment rate. While sectors such as food, chemicals, plastics, textiles and metals play an important role in Adana's economic structure, emerging sectors such as logistics, foreign trade, energy and recycling offer different opportunities to the labor market. The development of new sectors and the transformation of existing sectors support the dynamic structure of the labor market. Adana's labor market is also expanding spatially, which necessitates updating and improving cooperation networks between employers, job seekers and relevant institutions.

Research reveals the need to effectively monitor employment opportunities in new sectors and to establish strong collaborations between employers and sector representatives. In this process, monitoring job opportunities in new sectors, in addition to traditional employment areas such as OIZs, will contribute to making workforce planning more effective. In particular, the logistics, foreign trade, chemicals and energy sectors have great potential for formal labor employment. In parallel with the expanding spatial structure of the labor market, updating cooperation and networks in this area will allow for a balanced management of labor supply and demand.

### 4.3. Sectors with Labor Shortage

There are significant gaps in the labor market in Adana, especially in industrial, service, trade, agricultural and Technical and Vocational Roles. While the lack of staff in industrial occupations such as CNC operators, welding masters, electrical technicians and machine assemblers negatively affects production processes, the high demand for housekeepers, waiters and graphic designers continues in the service sector. In the trade and logistics sector, there is a shortage of sales and marketing personnel, logistics staff and drivers, while in the agricultural sector, seasonal workers as well as skilled workers in specialized areas such as pruning and animal care are still needed. In Technical and Vocational Roles, there is a shortage of air conditioning and generator maintenance technicians, while in the textile sector there is a high demand for yarn collectors, baggers and machinists. To sustain Adana's economic potential, it is essential to expand sector-specific training programs and strengthen employment incentive schemes to address labor shortages.

In this section, the sectors and occupations with labor market gaps in Adana are evaluated and the impact of these gaps on regional labor force dynamics is discussed. Assessing the prominent and promising sectors in Adana's access to the labor market is important for identifying areas with labor shortages. Despite high unemployment rates, there is a serious labor shortage in certain sectors in the city. The need for labor force is shaped by different dynamics in basic sectors such as industry, services, trade and agriculture. While the expansion of OIZs and the establishment of new specialized OIZs increase the need for labor in the industrial sector, both seasonal and permanent labor demand stands out in the agricultural sector.



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**Table 86.** Sectors and Positions with Labor Shortages in Adana

Sector	Profession
Industry	CNC Operators
Industry	Welding Masters
Industry	Electricity Technicians
Industry	Machine Assemblers
Industry	Chemistry Technicians
Service	Housekeeping Staff
Service	Waiters
Service	Commissary
Service	Graphic Designers
Trade & Logistics	Sales and Marketing Personnel
Trade & Logistics	Logistics Elements
Trade & Logistics	Drivers
Agriculture	Harvest Workers
Agriculture	Pruning Workers
Agriculture	Animal Care Workers
Technical and Vocational Roles	Air Conditioner Maintenance Technicians
Technical and Vocational Roles	Generator Maintenance Specialists
Textile	Yarn Pickers
Textile	Baggers
Textile	Packers
Textile	Machinists
Energy & Air Conditioning	Solar Energy Technicians
Energy & Air Conditioning	Heating System Technicians
Recycling	General Workers

Table 86 summarizes the most needed occupations by sector in Adana according to the data obtained from qualitative interviews. In the industrial and technical sectors, CNC operators, welding masters, electrical technicians, machine assemblers and chemical technicians are among the occupations with the most significant labor shortages. The lack of employees in these positions causes serious disruptions in industrial production and shows that labor supply in the sector is insufficient to meet demand. There is also a high labor shortage in positions requiring technical skills such as machine operators and machine assemblers.

In the service sector, especially in the field of accommodation and food and beverage, there is a constant need for labor force for housekeepers, waiters and busboys. However, the generally insufficient qualifications of those working in the sector cause employers to have difficulty in finding employees. The same situation is observed in graphic design and other creative sectors.

In the trade and logistics sector, there is a high demand for sales and marketing personnel, logistics personnel and drivers. The shortage of drivers is so pronounced that retired drivers are employed in service vehicles and there are difficulties in the supply of labor in this field.

The shortage of qualified agricultural workers is a major problem in the agricultural sector. Lack of workers in areas such as harvesting, pruning and animal care disrupts production processes. It is emphasized that especially pruning workers directly affect crop yields with their cutting techniques. Although agricultural workers are offered high wages on a daily basis, demand for these positions is low due to difficult working conditions.

In the labor market, there is a lack of demand for some occupations that require technical skills even above certain salary levels. For example, in Technical and Vocational Roles such as air conditioning maintenance technicians, generator maintenance specialists and CNC operators, employers cannot find enough staff despite offering salaries higher than the minimum wage. It is emphasized that employers should invest in skilled labor to close the labor shortage in these fields.

Inadequate vocational training is shown as one of the main reasons for the deficit in the labor market. Especially the low quality of education in vocational high schools has a negative impact on the process of training technical personnel. It is stated that the importance given to white-collar occupations has pushed the training of intermediate staff to the second plan and this situation has increased the labor shortage in the industry.

Textile, garment, machinery and chemical industries play an important role in Adana's industrial sector. While the petrochemical and chemical industries are expected to grow rapidly, the metal and machinery industries also offer great employment opportunities. However, the prevalence of contract manufacturing, especially in the shoemaking and textile sectors, increases informal employment and disorganizes the labor market.

The textile sector stands out as one of the most critical sectors in terms of labor shortage. The sector is in high demand for both skilled and unskilled labor. While unskilled labor

**“Migrant labor plays an important role in the labor market in Adana. The impact of the migrant economy on the labor market is more pronounced in small enterprises and in the agricultural sector.”**

demand is high in jobs such as yarn pickers, baggers and packers, there is a shortage of skilled labor in positions such as machinists. The textile sector is also an important field in terms of women's employment and a significant portion of the workers in the sector are women.

Adana's climatic conditions also affect employment dynamics. Labor demand is increasing in sectors such as air conditioning, air conditioning maintenance and repair and solar energy systems. Especially the intense demand for air conditioning maintenance services increases the importance of qualified personnel to work in this sector.

Large polyester and fiber producers, one of the biggest players in the industry, provide raw materials to the healthcare, textile, automotive and packaging industries. There is also a high demand for labor in the iron and steel, paint, plastics and aluminum industries. The rapid growth of the chemical industry also increases the need for labor in this field.

In Adana, migrant labor plays an important role in the labor market. The impact of the migrant economy on the labor market is more pronounced in small businesses and the agricultural sector. Small businesses, referred to as ethnic entrepreneurship, constitute an important source of employment creation for the vulnerable migrant population, while the agricultural sector has become an important field of work for migrants under temporary protection.

Adana's labor market is characterized by chronic labor shortages, especially in agriculture and industry. While the need for unqualified labor is high in the agricultural sector, there is a shortage of qualified personnel in occupations requiring technical skills in industry. The recycling sector also stands out as an important sector in terms of unskilled labor demand.

The imbalance between labor supply and demand in Adana is not only related to the quality of labor, but also to employers' wage policies and working conditions. In some sectors, the main reason for labor shortages is the lack of knowledge, skills and experience required by the line of work, while in other cases, employers' low wage policies and harsh working conditions exacerbate the difficulties in finding labor.

One of the major reasons for the labor shortage in the agricultural sector is that the Çukurova region allows for four-season agricultural production and therefore there is a continuous demand for labor throughout the year. Labor demand is high in labor-intensive production areas such as citrus fruits, bananas, watermelons, onions, potatoes and greenhouse agriculture.

In conclusion, the labor market in Adana is facing various labor shortages in different sectors. While employment opportunities in agriculture, industry and service sectors are wide, factors such as the lack of workers in jobs requiring technical skills, informal employment and employers' wage policies may prevent the labor market from functioning efficiently. Given Adana's economic potential, developing policies to balance labor supply and demand is critical to ensuring sustainable growth in the labor market.

#### 4.4. Labor Force Qualifications and Supply-Demand Matching

The mismatch between labor supply and demand in Adana is exacerbated by sectoral imbalances and deficiencies in vocational training. While there is an excess of unqualified labor in sectors such as agriculture, construction and apparel, there is a shortage of qualified personnel in industry and technical professions. The concentration of migrant labor in certain sectors has changed the supply-demand balance and increased informal employment. Wage levels and precarious working conditions offered by employers discourage migrants from moving into sectors such as agriculture, construction and industry, widening the shortage of skilled labor. Strengthening cooperation between vocational high schools and industry and expanding vocational training programs is a critical step to ensure the supply-demand balance.

In this section, the structural dynamics of the labor market in Adana, the quality of the labor force, the supply-demand mismatch and the role of education on this balance are evaluated. Rapid population growth across the country and the rural-urban migration process cause

the labor force potential in cities to grow continuously. However, it is not always possible to create employment in the industrial and service sectors to balance this increase. This situation stands out as one of the main factors determining labor force participation rates. A similar trend is observed in the TR62 region, which includes Adana and Mersin provinces, where the employment rate remains at 45.7%, compared to 27.8% for women and 64% for men.

Adana's economic structure is shaped by a combination of agriculture, industry, trade and service sectors and demands a wide range of labor force due to its sectoral diversity. However, the mismatch between labor supply and demand stands out as one of the main problems faced by both employers and employees. The fact that the labor market is formed at different levels creates excess labor supply in some sectors and serious labor shortages in others.

For many years, Adana has been meeting its labor needs, especially in the agricultural sector, with seasonal workers from Eastern and Southeastern Anatolia. However, in recent years, Syrian migration has created a major shift in labor supply in agricultural production. Migrant labor has been found to fill an important gap in sectors such as agriculture, apparel, shoemaking and furniture. Especially in agricultural production, it is emphasized that migrants have transformed the structure of the mobile labor force by replacing seasonal workers.

However, this change has also led to the growth of the informal economy. While there are arguments that the increase in labor supply has led to a decline in wages, it is argued that this effect will be limited in the long run as migrant labor is integrated into the economic system. The concentration of migrant labor in the recycling sector and the rapid growth of this sector in Adana in recent years shows that migrant labor is shaped by market demand.

In the labor market, employers face different levels of labor shortages. The main reasons for this shortage include difficult working conditions and wage policies that do not meet employee expectations. Although labor supply is available in some sectors, there are difficulties in employment as the wages offered are not attractive enough for employees. Especially in the agricultural sector, it is reported that there are difficulties in recruiting workers due to the harsh working conditions. Similarly, in the construction sector, jobs that require intensive physical labor lead to difficulties in finding labor despite current

wage levels. The imbalance between labor supply and demand is particularly pronounced for skilled labor. In the industrial sector, there are serious labor shortages in occupations requiring technical skills such as CNC operators, welders, electrical technicians, machine assemblers and chemical technicians. However, it is observed that the wage levels offered by employers in these occupations do not attract employees and make it difficult for the educated labor force to turn to these fields.

Education plays a critical role in increasing qualifications in the labor market. The low quality of education in vocational high schools and the prioritization of white-collar training programs are among the factors that make it difficult to train intermediate staff. It is emphasized that cooperation between vocational high schools and industry should be increased in order to develop the technical skills needed in the industrial sector. In addition, employers need to improve the skills of their employees by organizing vocational training programs within their own organizations.

Although the dynamic structure of the labor market in Adana offers a relatively successful model for providing employment to unskilled labor, it is observed that the demand for labor is largely directed towards the informal economy. Especially in sectors such as agriculture, construction and textiles, informal employment rates are high, which makes it difficult for the labor market to function regularly.

While the fact that migrant labor meets the need for labor in some sectors causes employers to gain cost advantages, the spread of informal employment has a negative impact on the social security system. At this point, it is emphasized that the labor market should be formalized and migrant workers should be included in legal employment processes.

One of the areas where the mismatch between labor supply and demand in Adana is most evident is in large industrial enterprises. Despite having qualified labor force, individuals who do not want to work in industry due to low wage offers prefer to work as cashiers or security guards in supermarkets. This situation reveals the need to ensure wage balance in the labor market.

In sum, the mismatch between labor supply and demand in Adana is evident in many sectors. While there is an excess of unqualified labor in sectors such as agriculture, construction and apparel, there is a shortage of qualified labor in industrial and technical fields. Employers' wage policies and working conditions stand out as one of the main factors affecting labor supply.

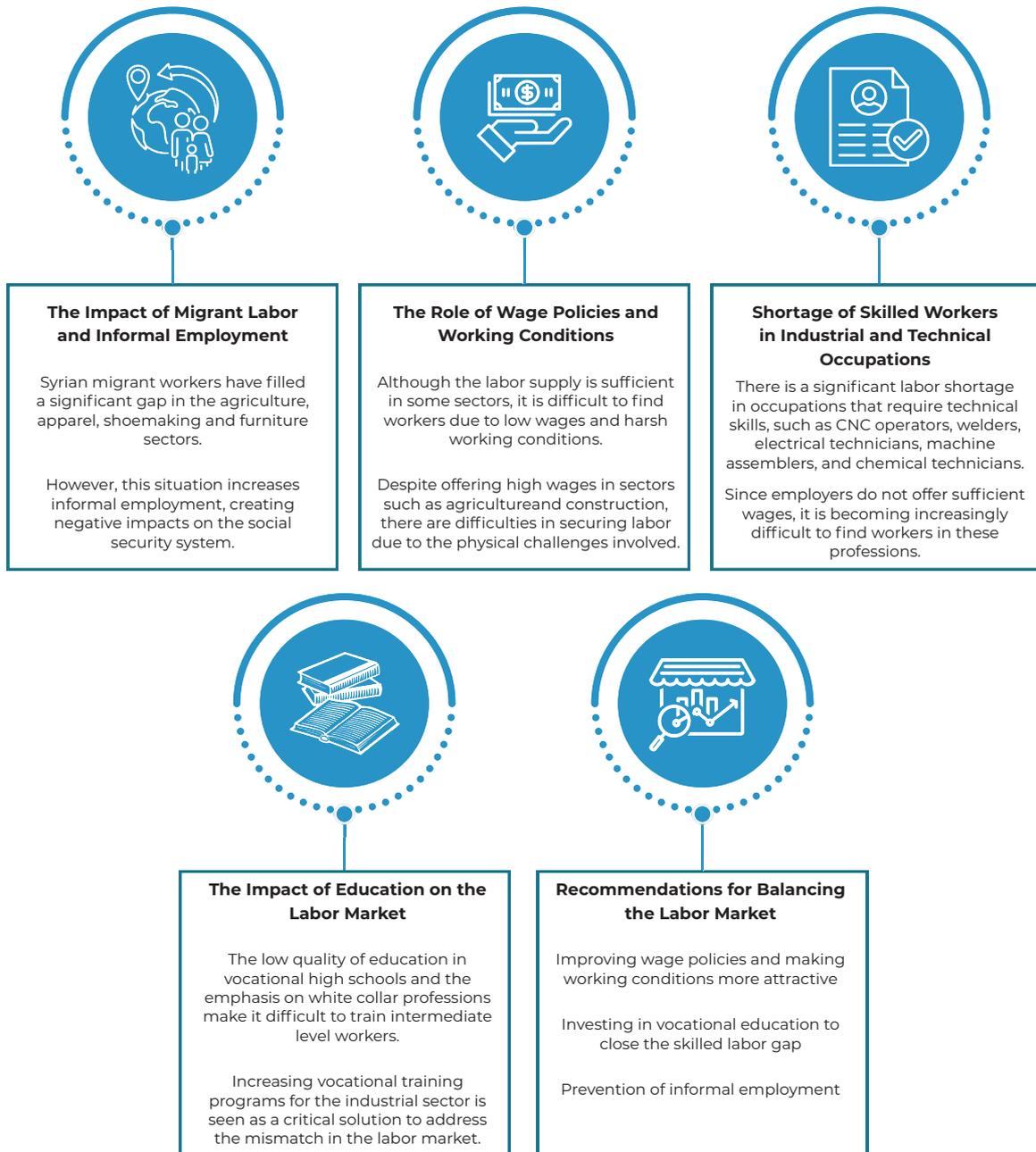


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The use of education as a tool to match supply and demand in the labor market will play an important role in closing the gap in qualified labor force. In particular, training programs to be carried out in cooperation with vocational high schools, professional chambers and industry can ensure a balanced structure of the labor market in Adana.

**Figure 5.** Findings and Recommendations on Labor Force Qualifications and Supply-Demand Matching in Adana



The findings on labor force qualifications and supply-demand matching in Adana are summarized in Figure 2. In conclusion, it is clear that education, wage policies and working conditions need to be improved to improve the supply-demand match in the city. In order to overcome the shortage of qualified labor in the industrial and service sectors, more investment should be made in vocational training and the labor market should be regulated through legal employment processes instead of informal employment.

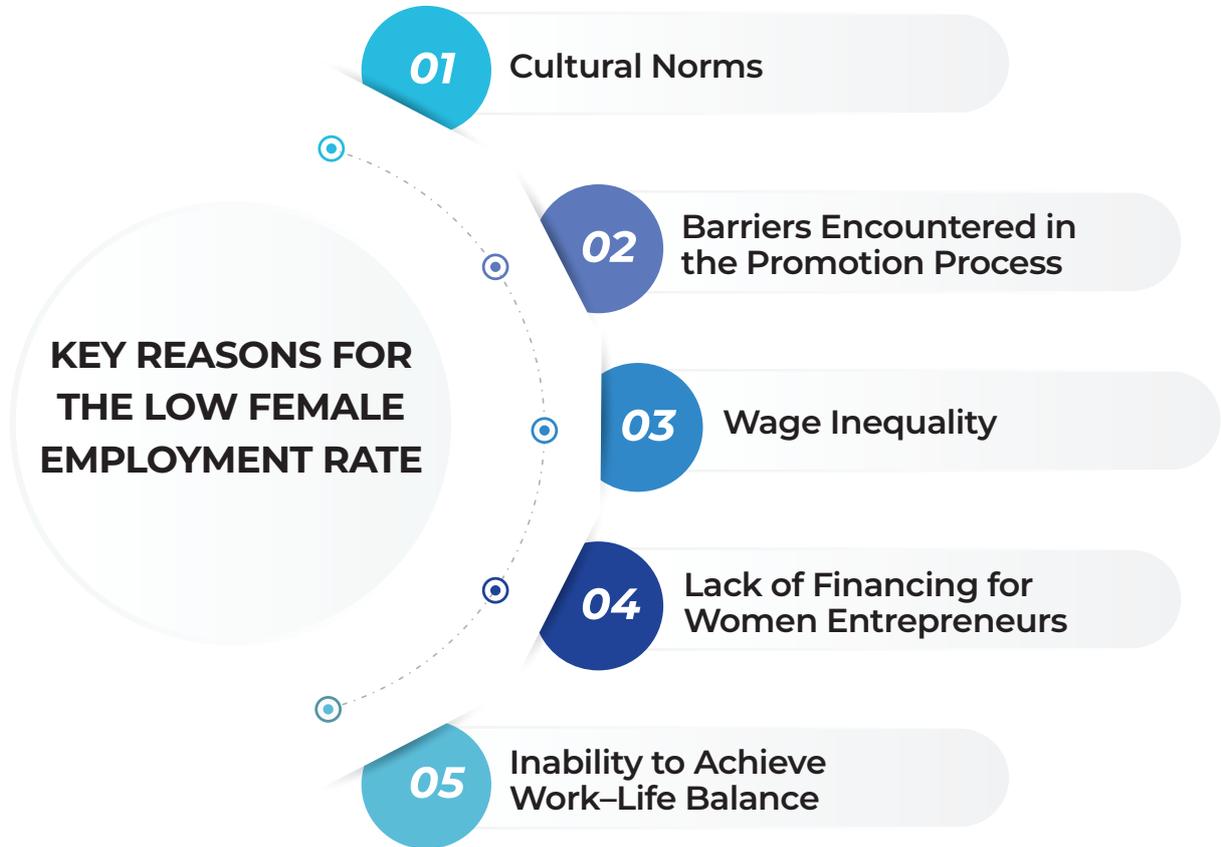
#### 4.5. Women's Labor Market Participation: Opportunities and Constraints

Women's labor force participation in Adana is low compared to Türkiye as a whole, and various structural barriers stand out in increasing employment rates. Cultural norms, childcare responsibilities, and employers' perceptions of the female workforce make it difficult for women to gain a larger share in the labor market. While women's employment is predominantly concentrated in agriculture, textiles and services, there has been an increase in recent years in sectors such as plastics recycling, chemicals and energy. While the labor force participation of migrant women has increased, it is largely in the informal sector and in low-paid jobs. Providing childcare support, raising employer awareness on women's employment and diversifying vocational training programs are critical for women to gain a stronger foothold in the labor market.

In this section, the general situation of women's employment in Adana, trends in women's labor force participation, the impact of cultural norms, sectors where women work intensively and measures to be taken to increase women's employment are evaluated. As in Türkiye in general, women's participation in the labor force in Adana is considerably lower than men's, and according to 2023 TURKSTAT data, the labor force participation rate of women in the TR62 region is 33.4%, while that of men is 71.2%. While the employment rate of women is calculated as 27.8%, unemployment rates are higher for women than men at 16.9%. These data reveal that approximately three out of every four women in Adana are excluded from the labor market. Compared to the labor force data for Türkiye as a whole, the employment rate of women in Adana is below the national average.



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There are several main reasons for the low female employment rate in Adana. Cultural norms, childcare responsibilities, low levels of education and employers' perceptions of the female workforce are the main factors limiting women's participation in employment. The limited number of sectors in which women can work and employers' hesitancy towards women's employment make it difficult for them to transition to the formal labor force. In Adana, women's employment is mostly concentrated in agriculture, textiles, services and some industrial sectors. In the agricultural sector, women are employed in jobs such as packaging, fruit and vegetable stacking and product sorting in addition to working in the fields. Although women's labor has a large share in the textile sector, the rate of informal employment is quite high and working conditions are precarious. In the service sector, tourism, restaurants and beauty services stand out as areas where women work intensively. In recent years, women have also been employed in the plastic recycling, chemical and energy sectors, and women's labor is particularly important in food processing plants.

On the other hand, labor force participation of migrant women in Adana is also on the rise. In particular, the labor force participation rates of women under temporary protection and

with SuTPs have increased as the duration of their stay in Türkiye has increased. However, this participation is largely in informal sectors and low-paid jobs. While migrant women generally work in the textile, food and recycling sectors, it is observed that some employers have started to prefer women in the workforce. Migrant women's labor force orientation extends beyond sectors traditionally dominated by female labor. In addition to traditional fields such as textiles and the food industry, migrant women's employment has increased in areas such as detergent production, the plastics industry and even pumping. Women have become more in demand than men, especially in some jobs that require physical endurance. One of the biggest obstacles migrant women face in the employment process is childcare. The fact that women bear the burden of childcare alone in the family directly affects their labor force participation rates. It is thought that the labor force participation of migrant women can increase further if daycare and childcare supports are provided.

It is stated that some basic measures should be taken to increase women's participation in the labor market. It is important to change employers' perceptions of women's employment and to create incentives that will enable women to find jobs not only in certain sectors but also in the manufacturing industry. Improving childcare services and providing daycare support for working mothers can remove one of the biggest obstacles to women's employment. In addition, increasing vocational training programs for women can encourage their participation in the labor force in more sectors. The fact that women's current qualifications do not match the needs of employers is seen as a factor that complicates their employment process. Instead of traditional courses such as sewing and embroidery, it is recommended that public education centers offer employment-oriented vocational courses in office software, foreign trade and areas requiring technical skills. Raising employers' awareness on cultural sensitivities and making the work environment suitable in sectors where women will be employed may encourage women's participation in the labor market.

Various civil society organizations and women's cooperatives for women's employment carry out projects that support women's participation in the workforce. These structures enable women to participate more actively in agriculture, greenhouse farming, textiles and manufacturing sectors, and also contribute to their economic independence by encouraging entrepreneurial activities. Women oriented employment models provide important examples that accelerate women's transition to the formal labor force.

As a result, women's labor force participation in Adana remains low compared to Türkiye as a whole, but the labor market integration of women, especially those with SuTPs is gradually increasing. Women are generally employed in agriculture, textile and service sectors, with an increasing trend in industry and manufacturing. To increase women's labor force participation, childcare support should be provided, employers' awareness of women's employment should be raised, and vocational training programs should be diversified. Women-focused cooperative models offer an important opportunity to increase women's employment and encourage participation in economic life. Structural reforms are needed to strengthen women's economic independence and increase their participation in employment. Opening up more space in the labor market for women workers would be a major gain in terms of both economic development and social balance.

#### 4.6. Employers' Attitudes towards Migrant Workforce and Market Dynamics

Employer attitudes towards migrant labor in Adana vary according to sectoral needs, economic conditions and social dynamics. While the employment of migrant workers is widespread in labor-intensive sectors such as agriculture, textiles, construction and recycling, employers in the industrial and service sectors are more cautious towards migrant labor. Nationally and internationally supported employment projects that encourage the inclusion of migrants in the labor force have been effective in breaking employers' prejudices on this issue, but informal employment practices have increased the precariousness of migrant labor. While some employers see the opportunity to employ migrant labor at low wages as an advantage, there are also employers who distance themselves from migrant employment due to social pressures and legal procedures. Sustainable integration of migrant labor requires raising awareness among employers, reducing informal employment and strengthening policies to improve working conditions.

This section assesses the role of migrant labor in different sectors of Adana's labor market and how employers' attitudes towards this labor force are shaped. The labor market in Adana has a dynamic structure in which migrant labor is integrated. In the past, the city has hosted migrant labor from Southeastern Anatolia for agricultural work and this process has become a part of the urban fabric. Migrant labor plays a critical role in many sectors from agricultural production to industry. However, unlike previous labor movements, the SuTPs has an international dimension and emerges as a result of sudden events. This situation

leads to greater difficulties in the process of integration into economic life. The attitudes of employers towards this group play a decisive role in the labor market participation of the OECD, especially in their transition to formal employment.

It has been found that employers generally have a positive approach to SuTPs in Adana. However, the reasons for this positive approach vary. Some employers see migrant labor as an advantage in the labor market and are more willing to employ them. However, some employers categorically refuse to hire migrant workers, while others are influenced by social dynamics such as neighborhood pressure and remain distant from migrant employment. Although it is common to employ migrant workers, especially in low-skilled jobs, some employers may have negative views about the work discipline of migrant labor. It has been observed that such prejudices are effective on some employers and even employers who have not employed any migrants can express these negative discourses. On the other hand, field observations show that most employers who receive support from employment projects continue to employ foreign labor after these programs end.

One of the most important factors shaping employers' attitudes towards migrant labor has been projects that promote the inclusion of migrants in employment. The refugee employment programs supported by the European Union and launched in 2016 offer various support mechanisms to encourage the integration of migrants into the labor market. Within the scope of these projects, employers are provided with different incentives for employing migrant labor and additional financial support, especially for groups such as women and youth employment. These projects in Adana have provided many employers with the opportunity to work with migrant labor and have contributed to overcoming employers' prejudices on this issue.

There are divergent views among employers on the inclusion of migrant labor in formal employment. Some employers continue to employ migrant workers even after benefiting from support programs, while others move away from migrant labor when these supports end. Some employers have been found to take advantage of the sensitive and vulnerable position of the foreign workforce and employ them at low wages. Migrants are more likely to be employed in the informal sector, increasing their vulnerability in the labor market. At times, migrant workers are forced to work in jobs that do not match their skills and social status.

Another factor affecting employers' approach to migrant labor is sector-based needs. Migrant labor fills an important gap in labor-intensive sectors such as agriculture, textiles, construction and recycling. However, in the industrial and service sectors, employers are more cautious towards migrant labor. In certain sectors, employers' perceptions of migrant employment have changed over time and demand for migrants has increased in line with labor needs.

Discrimination against migrant labor sometimes manifests itself in the employment policies of employers. It has been observed that some employers refrain from employing migrant workers due to social pressure. In addition, it is emphasized that migrant workers are employed at lower wages in the labor market, which leads to imbalances in the labor market. The prevalence of informal employment makes migrants more vulnerable in the labor market. In addition, the fact that some employers shy away from legal procedures and language barriers are also cited as factors that make it difficult to employ migrant workers.

The impact of projects carried out to ensure the economic integration of migrant labor on employers stands out as an important issue. Increasing awareness-raising activities for employers can contribute to breaking down prejudices against migrant labor. In addition, policies need to be developed to improve working conditions and reduce unregistered employment in sectors where migrants are employed. Prejudices against vulnerable groups constitute a significant barrier to migrants' access to the formal labor market. Awareness raising activities by the institutions and employees of projects supporting access to the labor market can be effective in transforming employers' perspectives on migrant labor.

In conclusion, employer attitudes towards migrant labor in Adana vary. While some employers view the migrant labor force as a positive factor, others have a distant approach to employing migrant workers. National and internationally supported employment projects play an important role in reducing prejudices by positively influencing employers' perceptions of migrant labor. However, for migrants to be fully integrated into the labor market, informal employment needs to be reduced, working conditions need to be improved and employers' awareness of migrant labor needs to be raised. Therefore, it would be a critical step for the sustainable integration of the migrant workforce if institutions working to increase access to the labor market are not limited to job matching processes, but strengthen awareness-raising and support mechanisms to change employers' attitudes.

#### 4.7. Barriers to Migrants' Transition to the Formal Labor Market

In Adana, migrant labor's transition to formal employment is significantly constrained by structural and bureaucratic barriers. Legal regulations such as residence permits, closed neighborhoods, the requirement for travel permits and work permits limit migrants' labor mobility and complicate employment processes. The language barrier stands out as one of the main obstacles faced by migrants not only in job interviews but also in banking transactions, insurance registrations and legal procedures. Employers' non-compliance with contract terms, low wage policies and precarious working conditions cause migrant workers to avoid formal employment. Moreover, the impact of social assistance on employment and the fear of repatriation make it difficult for migrants to engage in long-term formal employment. Increasing language training programs, improving work permit processes and strengthening incentive mechanisms for employers are needed to accelerate the transition to formal employment.

The previous sections have discussed the barriers faced by women with SuTPs in participating in the labor market. However, challenges in accessing formal employment are not limited to women, but extend to the migrant workforce as a whole. This section will specifically address the structural and bureaucratic barriers faced by the Syrians under Temporary Protection (SuTP) / International Protection Status Holders and Applicants (IPSHA) in transitioning to the formal labor market. These obstacles include residence permits, closed neighborhoods, travel permit requirements, language barriers, bureaucratic processes, violations of employer agreements, the impact of social assistance on employment, uncertainty and fear of repatriation, and limited incentives.

The factors that make it difficult for migrants to access the formal labor market are often interconnected and many migrants experience these barriers simultaneously. For example, the language barrier becomes a serious problem not only in job interviews, but also at different stages such as opening salary accounts, obtaining work permits, etc. Even if solutions are found to overcome the language barrier in job interviews, language barriers cause additional difficulties for migrants in banking, insurance registration and legal processes.

Bureaucratic processes and legal regulations are also one of the main factors complicating migrants' transition to the labor market. The Ministry of Interior's Presidency of Migration

Management can close certain neighborhoods or districts to new foreign registration by monitoring foreign population density. While these practices are dynamic and can change over time, this is a serious restriction for migrants who want to work in a place other than the province where they are registered. In order for individuals under temporary protection to work in a different city, they must first obtain a travel permit from the province where they are registered. This poses a significant obstacle for migrants who want to find a job in jobs that require travel, in the transportation sector or in neighboring provinces. Although there are labor shortages in many sectors, such administrative restrictions limit labor mobility and complicate the process of finding a job for migrants.

Work permits also constitute an important barrier to access the labor market. According to regulations set by the Ministry of Labor and Social Security, foreigners under temporary protection must have completed at least six months of temporary protection in order to obtain a work permit. In addition, restrictions such as a limit of no more than 10% of the total number of foreigners under temporary protection working in a workplace reduce employers' interest in employing migrants. The requirement for prior authorization for employment in certain sectors further complicates the process. Especially in some occupational groups, the approval processes of the relevant institutions must be completed before starting work. This can prolong the transition to the formal labor market and make it more difficult to find a job. In addition, the work permit process is also an important barrier to transition to the labor market. In certain cases, work permits can take more than three months. The prolonged process creates uncertainty for both employers and migrant workers and makes integration into the labor market more difficult.

Another factor affecting migrants' entry into the labor market is employers' non-compliance with labor agreements and violations of the terms of the agreement. Some employers pay lower wages than initially agreed upon, do not pay overtime wages or create additional difficulties in working conditions. Negative feedback has been received from beneficiaries referred to some firms. This situation causes migrants to experience insecurity in transitioning to the formal labor force.

The impact of social assistance programs on formal employment is also an important topic of debate. Social assistance projects developed between the European Union and Türkiye and implemented since 2016 have been designed to help migrants under temporary protection meet their basic needs. This assistance, provided through the Kızılaykart, helps

migrant households meet their food, shelter and other basic needs. However, as of this year, some changes have been made to the Social Safety Net (SSN) program and all men between the ages of 18-60 have been excluded from the program. Migrants are concerned that their social assistance will be cut off if they take up an insured job, which they see as a risk in the transition to formal employment. Although there are different views on how social assistance affects the transition to formal employment, it is anticipated that the changes made to the Social Safety Net (SSN) program may partially offset this situation.

Another important issue identified is the concern of the SuTPs about the discourses of repatriation. These discourses, which have been frequently voiced recently, create uncertainty among migrants and create uneasiness about participation in the labor market. Individuals who see their future as uncertain turn to short-term and informal jobs instead of long-term employment. This situation stands out as a factor that increases vulnerability in the labor market.

**Figure 6.** Barriers to Migrants' Transition to the Formal Labor Market

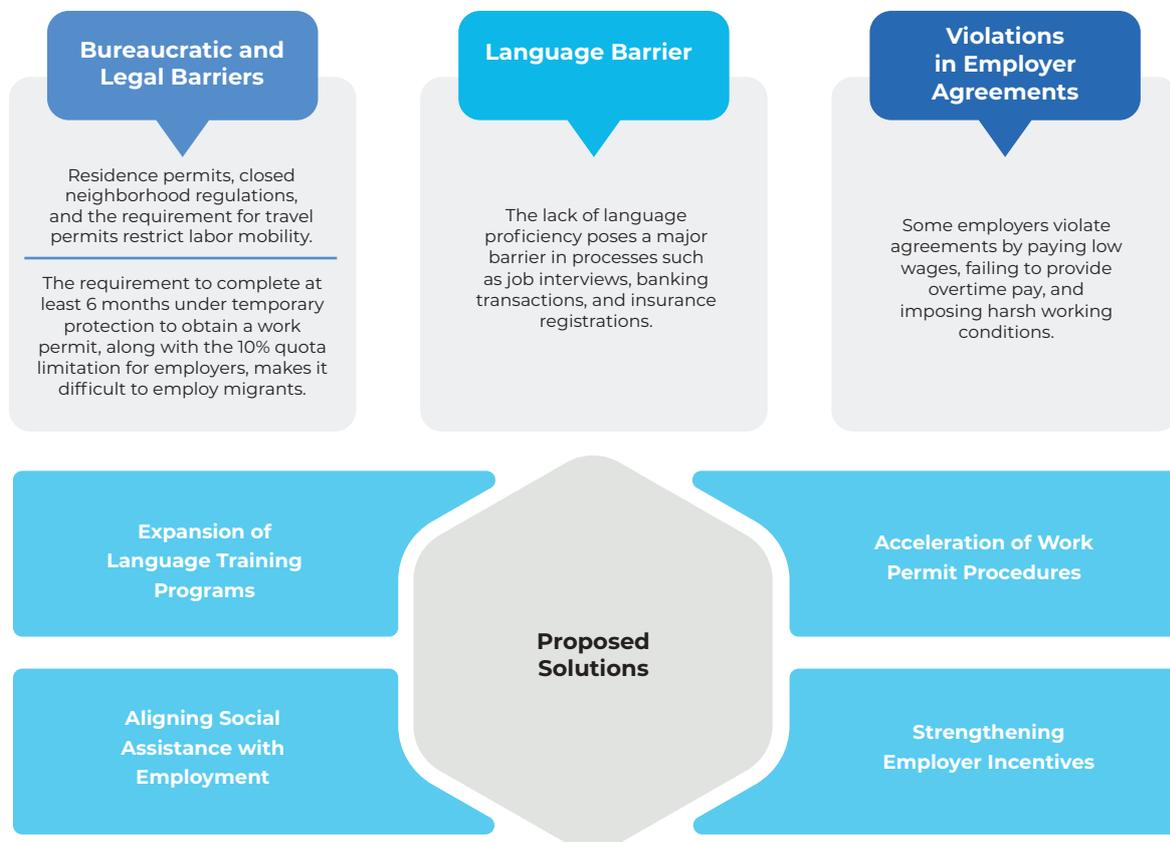


Figure 6 summarizes the barriers to migrants' transition to the formal labor market. In this context, there are multi-layered barriers in the process of transition to the formal labor market for under temporary or international protection. Factors such as residence permits, closed neighborhoods, the requirement for travel permits, language barriers, bureaucratic processes, conditions for obtaining work permits, violations of agreements by employers, the impact of social assistance and fear of being sent back are the main factors that make it difficult to transition to formal employment. In order to facilitate access to the labor market for under temporary or international protection, language training programs should be increased, work permit processes should be accelerated, social benefits should be aligned with formal employment, and incentive mechanisms for employers should be strengthened.

#### 4.8. Economic and Labor Market Effects of Potential Repatriation

The labor market in Adana may experience significant changes with the decrease in migrant labor in possible return scenarios. Given the large share of migrant workers, especially in the agriculture and textile sectors, repatriation could create serious labor shortages in these sectors. The fact that 80% of the workforce in the agricultural sector is made up of migrants increases the risk of disruption of production, while in the textile sector, it raises the possibility that some companies may not be able to continue their activities. In addition, the return of migrants who are educated and specialized in certain sectors may lead to a loss of workforce not only in labor-intensive jobs but also in industry and technology. Although the December 8, 2024 regime change in Syria is expected to accelerate the return process, the scale of these returns and their impact on the labor market remain uncertain.

In this section, the return tendency of the SuTPs living in Adana and the possible effects of this process on the labor market are evaluated. According to the data of the Ministry of Interior Directorate of Migration Management, the number of people with SuTPs registered in Türkiye as of December 31, 2024 was announced as 2 million 901 thousand 478. This number was recorded as 3 million 214 thousand 780 on December 31, 2023. In other words, the Syrian population in Türkiye has decreased by 313,302 people in the last year, a decrease of 9.75%.

On December 8, 2024, the regime change in the Syrian Arab Republic brought to the agenda the possibility of accelerating the repatriation process of SuTPs in Türkiye. In this framework,

different scenarios regarding repatriation processes are evaluated. Expert opinions suggest that return tendencies may increase if security conditions in Syria are restored. However, the scale of returns and their impact on the labor market remain uncertain.

In terms of the socio-economic structure and labor market in Adana, it is assessed that returns may have significant impacts. In particular, it is foreseen that there may be a serious labor shortage in sectors where FSSWs are heavily employed. It is emphasized that migrant labor is generally employed in jobs that the local population does not want to work in. Especially in the textile sector, it is stated that there may be a significant employment deficit and some companies may not be able to continue their operations due to this reason.

The agricultural sector stands out as one of the areas where returns can have the greatest impact. It has been determined that 80% of the labor force working in the agricultural sector in Adana consists of migrant workers. There are assessments that if the migrant population leaves, production in the agricultural sector may be seriously disrupted and some agricultural activities may come to a standstill.

However, it is emphasized that returns can have significant impacts not only in terms of unskilled labor, but also in terms of skilled labor. In recent years, it is known that many Syrian professionals who have been educated in Türkiye and specialized in specific sectors have joined the workforce, especially in R&D and technical fields. Therefore, it is assessed that returns may lead to a loss of labor force not only in labor-intensive sectors but also in industrial and technological fields.

In conclusion, while the Syrian population has been leaving Türkiye in recent years, the regime change on December 8, 2024 is expected to further accelerate this process. The extent to which returns will affect the labor market remains uncertain. There is a general consensus that the repatriation of the SuTPs, which occupies an important place in Adana's labor market, could lead to severe labor shortages, especially in the agriculture and textile sectors. In addition, the loss of skilled labor may also have long-term impacts on sectors.



#### 4.9. Inter-Institutional Communication Network in Transition to the Labor Market

In Adana, the process of transition to the labor market is not only limited to matching labor supply with employer demands, but also requires that the competencies of individuals match the qualifications required by the sectors. While the fluid nature of the labor market necessitates the development of flexible and adaptable cooperation mechanisms, the lack of interaction between stakeholders negatively affects employment processes. While migrant labor plays a particularly important role in secondary labor markets such as agriculture, textiles and construction, the need for migrant employment is increasing in certain sectors such as foreign trade. Studies show that employment projects are critical not only to encourage the transition to formal labor, but also to ensure long-term labor market persistence. However, in order to increase access to the labor force, information sharing among stakeholder institutions needs to be strengthened and up-to-date datasets need to be created to address the needs of sectors.

This section assesses the role of inter-institutional cooperation and communication network in the labor market transition process in Adana. The process of transition to the labor market is not limited to matching labor supply with employer demands. In this process, it is of great importance to match the skills and abilities of employees with the qualifications required by the sectors. Ensuring this alignment depends not only on individual competency development processes, but also on the formation of an effective communication network, information flow and cooperation mechanisms between stakeholders. Field studies in Adana show that the lack of interaction and coordination between stakeholders in some projects supporting transition to the labor force can negatively affect follow-up and guidance processes. The fluid nature of the labor market requires the development of flexible and adaptable cooperation mechanisms that take into account the dynamics of different social actors.

According to the findings of the field study, there is a labor shortage in almost all sectors. However, it is observed that there is a serious mismatch between the employment expectations of job seekers and the labor force profile required by the market. It is observed that occupations such as security guards, cashiers, police officers and watchmen are at the forefront in the participation of young people in the labor market, and therefore some sectors that require technical skills have difficulties in recruiting labor. This situation

leads to the formation of primary and secondary labor markets in the labor market. The primary labor market generally includes white-collar office jobs, and the participation of the migrant population in these fields is quite limited. However, the need for migrant labor is increasing in certain business lines such as foreign trade. The secondary labor market consists of agricultural work and skilled and unskilled blue-collar jobs. Migrant labor plays a particularly important role in the secondary labor market, and many of these sectors are directly affected by changes in labor supply.

In this context, there are significant opportunities for vulnerable groups to access the labor market in Adana. However, a dynamic interaction approach between stakeholder institutions is required to capitalize on these opportunities. Planned and strategic collaborations are one of the most important factors accelerating the transition to the labor market. During the fieldwork, some examples of good practice were also found.

Activities that can be carried out to strengthen the communication network include establishing job and career counseling offices, analyzing the occupational profiles of asylum seekers and the dynamics of the labor market, providing counseling services for employees, organizing information meetings with organized industrial zones and employers, and providing employers with incentives for the employment of project beneficiaries.

It has been observed that projects that support access to the labor force and have employment commitments offer participants the opportunity to remain in the labor market after the end of the project period and are critical to support the livelihoods of vulnerable groups. However, for these projects to be effective, barriers to transition to the formal labor market need to be taken into account. In some cases, these barriers can be directly linked to the rational decisions migrants make based on their own socio-economic situation.

In conclusion, the importance of projects in supporting vulnerable groups' access to the labor market and the positive effects of effective cooperation between stakeholder institutions have once again been demonstrated. However, the rigid division of labor and lack of information sharing between institutions can negatively affect follow-up and monitoring mechanisms during the transition to the labor market. Therefore, it is necessary to develop not only projects that support access to the labor force, but also data sets on employers' employment needs and desired qualifications. This will help to align the existing skills and talent base with the qualifications required by the sectors. In this context, dynamic

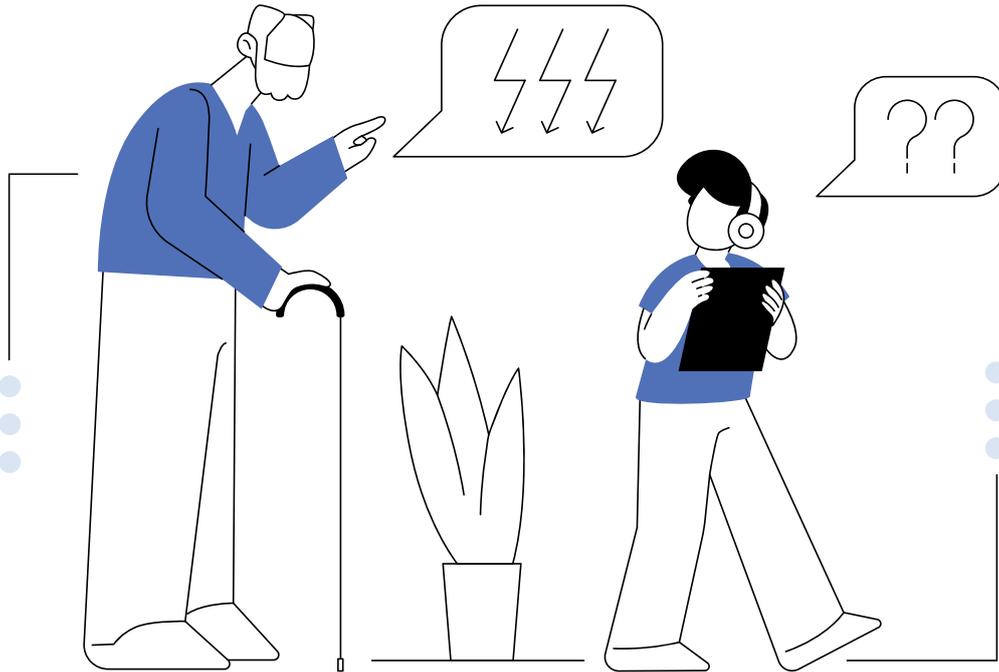


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and strong collaborations between stakeholders and increased information sharing are important factors to increase the efficiency of the labor market.

Through interviews, the views of employers, public institutions and other stakeholders on the labor market were revealed. In order to address the qualitative findings in a broader framework and to develop recommendations for addressing the sectoral labor shortage, the next section will move on to the general evaluation and conclusion.



# CHAPTER V



# CHAPTER V

## 5. CONCLUSION AND RECOMMENDATIONS

This study aims to comprehensively analyze the labor market of Adana province and identify sectoral employment gaps, vocational training needs, factors that make it difficult to access the labor force and policy development areas. Field surveys, interviews, and questionnaires conducted within the scope of the study revealed the differences between the expectations of employers and job seekers, and the employment dynamics of the province were evaluated with secondary data obtained from institutions such as TURKSTAT, ISKUR and SSI. The main objective of the study is to reveal the imbalances in the labor market in Adana, to identify which sectors have labor shortages and to develop concrete recommendations on how to plan vocational training in the most efficient way. At the same time, it is aimed to ensure that the labor supply is directed in accordance with the needs of the sectors and thus minimize the loss of time and effort.

The findings are systematically summarized in Table 88. This table presents a summary framework that analyzes the reasons for the labor shortage in the sectors identified as a result of the analysis of Adana's labor market, expected qualifications and qualifications, gender preferences of employees, and attitudes towards vulnerable groups and formal employment. While the unemployment rate in Adana is 14%, well above Türkiye's average (Table 15), the labor force participation rate is 50.9%, which is below Türkiye's 53.3% (Table 17). Women's labor force participation rate is 27.8%, which is below Türkiye's average (30.4%). ISKUR's sectoral labor force analysis also confirms this imbalance and reveals that there are serious labor shortages, especially in the industrial and agricultural sectors. One of the biggest challenges to women's employment is the limited employment opportunities for women in the industrial and service sectors and the lack of factors such as childcare support.

There are significant labor shortages in the industrial sector in technical fields such as CNC operators, welding masters, electrical technicians and chemical engineers. In production areas in Adana Organized Industrial Zone (OIZ), labor shortages in positions requiring technical skills reach 25%. Employers state that the lack of vocational training and competent staff make it difficult to recruit in these areas.

The agricultural sector experiences disruptions in production processes due to the lack of seasonal workers. Although the need for agricultural employment in areas such as citrus, banana, potato and onion production is intense, high rates of informal employment and lack of social security negatively affect labor force continuity. Although mechanization in agricultural production has increased, the need for expertise in pruning, greenhouse agriculture and agricultural technology has increased.

Labor shortages are also observed in logistics, foreign trade and tourism. According to ISKUR's labor demand data for 2024, forklift operators, warehouse supervisors and foreign trade specialists are among the most demanded occupational groups. With the expansion of international trade, the lack of foreign language-speaking personnel further increases the employment gap in this sector.

In the IT and technology sector, there is a labor shortage in areas such as software developers, cyber security experts and data analysts. However, the limited number of vocational training programs for the IT sector in Adana makes it difficult to take advantage of employment opportunities in this field. Employers state that the lack of trained human resources in the field of IT and technology harms the digitalization processes of large firms in the city.

Sectors with saturation in the labor market were also identified. In this context, retail trade, small-scale food production and traditional handicrafts sectors were found to be saturated due to labor surplus. This situation reveals the need to direct the labor force to areas with higher demand such as industry, agriculture and service sectors. The majority of the applications that do not match with ISKUR's job vacancies are job seekers from saturated sectors.

The labor market in Adana has serious deficits in various sectors, and the need for qualified and unqualified labor is evident. In the construction sector, there is a particularly large shortage of unskilled workers. Although the demand for construction site and field staff is high, heavy working conditions and hot weather conditions negatively affect the labor supply in this sector. Similarly, in the field of welding, there is a shortage of qualified workers for specialized jobs such as gas, argon and CNC welding. The fact that qualified welders prefer to work in big cities for higher wages and tend to work abroad makes it difficult to supply labor in the sector.

When evaluated in terms of the need for industrial and technical personnel, there is a significant shortage in areas such as CNC operators, benders, water jet operators and textile machinery operators. The inadequacy of technical education programs and the inability of industrial enterprises to find trained personnel suitable for their workforce demands is a chronic problem in the sector. In the iron-steel and aluminum sectors, there is a need for both qualified and unqualified labor. In these sectors, labor supply becomes difficult due to physically demanding working conditions and employers have difficulty in finding qualified personnel to employ.

In the agricultural sector, seasonal labor shortages persist. There is a high demand for labor in the sector as the planting and harvesting processes of crops such as citrus fruits, bananas, watermelons, onions and potatoes rely heavily on manpower. However, declining interest of local workers in the sector and increasing wage demands restrict the supply of labor in the agricultural sector. In particular, the prevalence of informal employment makes it difficult for workers without social security to be employed in the sector for long periods of time. Similarly, there is a serious labor shortage in the chemical industry in terms of chemical engineers and production technicians. Inadequate technical training in the sector makes it difficult to find qualified personnel in the chemical industry and causes disruptions in the production processes of enterprises.

The textile and garment sector is also experiencing labor shortages in positions such as machine operators, sewing masters and quality control personnel. Due to low wages and long working hours, the flight of labor from this sector has accelerated, and the prevalence of informal employment in particular has adversely affected the sustainable labor supply in the sector. A similar situation is observed in shoemaking production, where the scarcity of qualified labor and the gradual decline in manual labor have disrupted the labor supply-demand balance in the sector.

The recycling sector, on the other hand, is largely based on unqualified labor and the local labor force is not attracted to this sector due to harsh working conditions. As a result, the sector is largely run by migrant labor, which increases informal employment. The labor shortage in the food and agriculture-based industry is also significant. Due to limited

automation and the reliance of production processes on human labor, there is a high demand for labor in the sector, but the supply of qualified labor in this field is insufficient.

In the service sector, there is a significant labor shortage in occupational groups such as barbers, carpenters, body fitters and plumbers. It is also observed that the need for qualified labor is increasing in the tourism and gastronomy sectors. In gas stations, there is a shortage of cashiers, pump attendants and cleaning personnel. Frequent job changes and the inability to ensure long-term employment create a constant need for labor in the sector.

In the IT and software sectors, there is a shortage of qualified labor in areas such as software developers, network administrators and cyber security experts. Inadequate IT trainings in the region and the acceleration of the digitalization process cause the labor shortage in the sector to grow even more. In the logistics and foreign trade sector, the lack of Arabic and English-speaking personnel, logistics personnel and forklift operators stand out as an important problem. Especially with the increase in international trade, inadequate foreign language skills and lack of vocational training in logistics limit labor supply.

There is also a growing labor shortage in the Solar Power Plants (SPP) and air conditioning sectors. There are not enough personnel in specialized fields such as air conditioning maintenance technicians, and long working hours and low wages accelerate labor outflow from the sector. In the field of solar energy systems, the lack of adequate training opportunities in positions requiring technical knowledge causes limitations in labor supply.

In general, Adana has serious labor shortages in the industrial, agricultural, textile, logistics, recycling and service sectors. Imbalances in the labor market are increasing due to the lack of qualified labor force, the failure of vocational trainings to meet sectoral demands and the difficulty of working conditions. In this context, various measures need to be taken to ensure the supply-demand balance in the Adana labor market, to close the shortage of qualified personnel needed by the sectors and to increase employment.

These are:

In order to train technical workforce for industry, Vocational Courses for technical occupational groups such as CNC operators, welding masters, electrical technicians, chemical engineers, gas and argon welding, forklift operators should be increased, especially in Adana Organized Industrial Zone (OIZ).

In cooperation with ISKUR and chambers of industry, applied training and internship programs in enterprises should be expanded, and Employment-Oriented Vocational Courses should be established for industry and service sectors.

Social security mechanisms should be established to encourage the transition of seasonal workers in agricultural areas such as citrus, banana, potato and onion production to formal employment.

In order to increase productivity in the agricultural sector, Vocational Courses should be organized to train an expert workforce in areas such as pruning, greenhouse farming and the use of agricultural technology.

Arabic and English language courses should be initiated for personnel working in the logistics and foreign trade sectors to work more effectively in international markets.

Vocational qualification certificates should be made compulsory for positions such as welders, forklift operators and warehouse supervisors, and training in these areas should be encouraged.

To increase employment in the IT sector, training programs in areas such as software development, cyber security and data analytics should be expanded in cooperation with universities, vocational high schools and private education institutions.

Support for R&D projects of local technology companies should be provided to encourage employment growth in the IT sector, and a state-sponsored **“Digital Skills Academy”** should be established for companies in the Informatics Valley.

In order to increase access to childcare services, nursery support programs for women working in the industrial and service sectors should be launched.

In order to increase women's participation in the industrial and service sectors, flexible working hours and part-time work opportunities should be expanded, while low-interest loans and grants should be provided to encourage women's entrepreneurship.

In order to increase labor supply in the construction sector due to harsh working conditions, support for housing, food and transportation should be increased, and departments such as construction technologies and construction site management should be expanded in vocational high schools.

In order to train a qualified workforce in the tourism and gastronomy sectors, certificate programs should be launched in areas such as cookery, service and hotel management, and internship and on-the-job training opportunities should be offered to students in cooperation with local restaurants and touristic enterprises.

To better match job seekers with the needs of sectors, a digital employment statistic should be created and automated matching algorithms should be developed to better align job vacancies with candidate applications to speed up recruitment processes.

In order to train technical personnel to work in the field of solar energy systems and air conditioning, renewable energy and air conditioning technologies departments should be opened in vocational high schools, and incentives for the green energy sector should be increased.

Incentive mechanisms should be created to create salary competition in the industrial sector, and occupational safety incentive packages should be prepared to increase the safety standards of workers working in particularly hazardous jobs (welding, heavy industry, etc.).

To support the participation of people with disabilities in the workforce, SSI incentives should be increased, accessibility standards should be made mandatory in workplaces, and rehabilitation and skills development programs should be organized in cooperation with the public-private sector.

The migrant workforce should be integrated into formal employment, the process of work permits should be accelerated, bureaucratic obstacles faced by employers in the application process should be reduced and free Turkish language training programs should be implemented to overcome language barriers.

For skilled migrants to participate in the labor force, recognition processes for professions such as engineers, doctors and health workers should be facilitated and professional qualification certificates should be accelerated.

To encourage migrants and locals to start their self-employment, micro-credit should be provided and migrant entrepreneurship should be supported.

Flexible models such as working from home, part-time employment and telecommuting should be encouraged to increase labor force participation.

Workforce planning should be made in disaster management and crisis situations, and alternative production plans should be developed in Adana and other industrial zones to prevent disruption of production after the earthquake.

In conclusion, in order to make the labor market in Adana more efficient, sectoral policy recommendations should be developed, vocational trainings should be updated according to sectoral needs, and labor guidance mechanisms should be strengthened. An advanced database should be created to facilitate employers' recruitment processes, and job placement processes should be accelerated by matching job seekers with the needs of sectors. Analyses and findings presented in this study provide a guiding framework for ensuring the balance between labor supply and demand in Adana, promoting formal employment and determining sectoral development strategies.



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**Table 87.** Sectors in Need of Labor Force and Required Labor Force Characteristics

Sector	Labor Shortage	Causes Of Labor Shortage	Expected Qualifications	Gender Preference	Attitudes Towards Vulnerable Groups	Attitudes Towards Formal Employment
<b>Construction</b>	1. Construction Site Elements	<ul style="list-style-type: none"> <li>Heavy working conditions, hot weather conditions and physical hardships lead to a constant shortage of labor in the sector as workers move away from the sector.</li> </ul>	<ul style="list-style-type: none"> <li>Occupational safety certificates</li> <li>Basic construction skills</li> <li>Field experience</li> <li>Master training</li> <li>Physical endurance.</li> </ul>	Male	Positive	Positive
	2. Field Elements					
	3. Unskilled Workers					
<b>Industry</b>	1. Twister	<ul style="list-style-type: none"> <li>The migration of qualified welders abroad or to big cities makes it difficult to find a competent workforce in the sector.</li> <li>Although high salaries are offered for CNC operators, argon welders and machine technicians, there is a lack of competent workers in these fields.</li> <li>Low wages drive workers with technical skills to other sectors.</li> <li>Lack of vocational training prevents the training of employees with the necessary skills for industry.</li> </ul>	<ul style="list-style-type: none"> <li>Welding Certificate (MIG/MAG welding)</li> <li>Hand dexterity</li> <li>To have technical training and experience in bending, water jet operator and CNC operator</li> </ul>	Predominantly Male / Female	Positive	Positive
	2. Water Jet Operator					
	3. CNC Operator					
	4. Welder					
	5. Textile Machinist					
	6. Gas Welder					
	7. Argon Welder					
	8. CNC Welder					
<b>Iron and Steel, Aluminum</b>	1. Iron and Steel Workers	<ul style="list-style-type: none"> <li>Due to heavy working conditions in the sector, it is difficult to recruit workers.</li> </ul>	<ul style="list-style-type: none"> <li>General skilled and unskilled labor needs,</li> <li>Technical information</li> </ul>	Male	OIZs are also negative.	Positive
	2. Aluminum Workers (skilled and unskilled)					



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Sector	Labor Shortage	Causes Of Labor Shortage	Expected Qualifications	Gender Preference	Attitudes Towards Vulnerable Groups	Attitudes Towards Formal Employment
<b>Agriculture</b>	<ol style="list-style-type: none"> <li>Seasonal Workers (Citrus Picking, Field Labor)</li> <li>Greenhouse Personnel</li> </ol>	<ul style="list-style-type: none"> <li>In particular, the cultivation and harvesting of crops such as citrus fruits, bananas, watermelons, onions, potatoes and greenhouse crops is still a labor-intensive process and there is a shortage of unskilled labor</li> <li>Due to the increasing wage demands of GKKS workers and the declining interest of local workers in the sector, labor needs cannot be met.</li> <li>Sensitive agricultural activities such as pruning require more skilled labor and the change in crop patterns in agricultural production increases the shortage of skilled and unskilled labor, especially in the production of labor-intensive crops such as fruits, onions and potatoes.</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge of agricultural mechanization</li> <li>Organic farming knowledge</li> <li>To be able to adapt to sustainable agricultural practices</li> <li>Harvesting, pruning knowledge</li> <li>Greenhouse agriculture knowledge</li> <li>Knowledge of animal care, slaughter techniques</li> </ul>	Predominantly Female / Male	<ul style="list-style-type: none"> <li>Migrant labor plays an important role in agricultural production, but working conditions are often precarious and substandard</li> </ul>	<ul style="list-style-type: none"> <li>Informal employment is widespread; employers are wary of formal employment due to social security costs.</li> </ul>
<b>Chemical Industry</b>	<ol style="list-style-type: none"> <li>Chemical Engineers</li> <li>Production Technicians</li> </ol>	<ul style="list-style-type: none"> <li>Adequate qualified personnel cannot be trained due to inadequacies in technical education.</li> </ul>	<ul style="list-style-type: none"> <li>To have a degree in chemical engineering or technical education,</li> <li>Knowledge of environmental regulations and command of production processes</li> </ul>	Female / Male	Positive	Positive



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**Table 87.** Sectors in Need of Labor Force and Required Labor Force Characteristics

Sector	Labor Shortage	Causes Of Labor Shortage	Expected Qualifications	Gender Preference	Attitudes Towards Vulnerable Groups	Attitudes Towards Formal Employment
<b>Textile / Ready to Wear</b>	1. Machine Operators 2. Sewing Masters 3. Quality Control Personnel 4. Packers 5. Baggers	<ul style="list-style-type: none"> <li>Workers are moving away from the sector due to low wages and working conditions.</li> <li>Widespread informal employment has a negative impact on sustainable labor supply.</li> <li>Decline in manual labor has increased the need for qualified labor force.</li> </ul>	<ul style="list-style-type: none"> <li>Use of textile machines,</li> <li>Hand dexterity</li> <li>Ability to adapt to mass production</li> <li>Quality control knowledge</li> </ul>	Female	The textile sector sees migrant labor as an important complementary element. It is reported that migrant workers are widely employed in this sector due to low wages and working conditions	Large businesses positive / small businesses negative
	<b>Shoe</b>	4. Shoe Production Worker (skilled and unskilled)	<ul style="list-style-type: none"> <li>Limited training opportunities to train qualified personnel in the sector,</li> <li>Young labor force is not oriented towards the sector</li> <li>Due to the reduction in manual labor, there is a significant reduction in labor supply.</li> </ul>	<ul style="list-style-type: none"> <li>To have knowledge about shoe production processes</li> <li>Manual dexterity and ability to adapt to fast production processes</li> <li>Knowledge of machine use (sewing machines, molding machines, etc.)</li> <li>Leatherwork and material knowledge</li> </ul>	Male	Positive
<b>Recycling</b>	1. Recycling Plant Workers (unskilled labor)	<ul style="list-style-type: none"> <li>Due to the fact that the sector relies heavily on unskilled labor and harsh working conditions, the interest of the local labor force in this field remains low.</li> </ul>	<ul style="list-style-type: none"> <li>Need for unskilled labor</li> <li>Endurance and physical strength</li> </ul>	Female / Male	Positive	Large businesses positive / small businesses negative



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**Table 87.** Sectors in Need of Labor Force and Required Labor Force Characteristics

Sector	Labor Shortage	Causes Of Labor Shortage	Expected Qualifications	Gender Preference	Attitudes Towards Vulnerable Groups	Attitudes Towards Formal Employment
<b>Food and Agro Based Industry</b>	1. Agricultural Machinery Production,	<ul style="list-style-type: none"> <li>In regions where agricultural economy is dominant, there is a need for labor force in agricultural machinery production, fertilizer industry and food processing facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Need for unskilled labor</li> </ul>	Female / Male	Positive	Positive
	2. Fertilizer Industry Workers,	<ul style="list-style-type: none"> <li>Intensive labor demand continues in post-harvest sorting and packaging processes</li> </ul>				
	3. Food Processing Technicians,					
	4. Product Sorting and Packaging Workers	<ul style="list-style-type: none"> <li>Due to limited automation and the fact that business processes rely heavily on human labor, labor demand remains high and supply is limited.</li> </ul>				
<b>Service</b>	1. Barber,	<ul style="list-style-type: none"> <li>Employers have difficulties in finding employees in the fields of housekeeping, waiters, waitresses, busboys and graphic designers as their qualifications are generally lacking.</li> </ul>	<ul style="list-style-type: none"> <li>Need for skilled and unskilled labor</li> <li>Knowledge of machine use (agricultural machinery, food processing equipment, etc.)</li> </ul>	Female / Male	Positive	Large businesses positive / small businesses negative
	2. Women Hairdresser					
	3. Carpenter					
	4. Body Shop					
	5. Plumber					
	6. Housekeeping Attendant,					
	7. Waiter					
	8. Bellboy					



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**Table 87.** Sectors in Need of Labor Force and Required Labor Force Characteristics

Sector	Labor Shortage	Causes Of Labor Shortage	Expected Qualifications	Gender Preference	Attitudes Towards Vulnerable Groups	Attitudes Towards Formal Employment
<b>Gas Stations</b>	<ol style="list-style-type: none"> <li>Cashier</li> <li>Pump Operator</li> <li>Cleaning Personnel</li> </ol>	<ul style="list-style-type: none"> <li>Due to the frequent turnover of employees in these positions and the lack of long-term employment in the sector, there is a need for a permanent workforce.</li> <li>Low wages and long working hours cause employees to move away from the sector.</li> <li>The inflexibility of working hours makes it difficult for workers to work in the sector for long periods of time.</li> <li>The demanding nature of night shifts creates difficulties in recruiting labor.</li> </ul>	<ul style="list-style-type: none"> <li>To have skills in customer relations</li> <li>Basic knowledge of cash register and payment systems (for cashiers)</li> <li>Physical stamina and ability to adapt to working long hours</li> <li>To be familiar with fuel oil safety rules and occupational health and safety</li> </ul>	Female / Male	Positive	Positive
<b>Informatics and Software</b>	<ol style="list-style-type: none"> <li>Software Developers</li> <li>Network Administrators</li> <li>Cyber Security Specialist</li> </ol>	<ul style="list-style-type: none"> <li>Inadequate IT trainings in the region, together with the acceleration of digitalization processes, increases the qualified workforce deficit in the sector.</li> <li>Limited support for future labor markets such as artificial intelligence and digital transformation leads to a shortage of specialized personnel in the IT sector.</li> </ul>	<ul style="list-style-type: none"> <li>Cloud computing expertise</li> <li>Digital or information technologies</li> <li>Software development skills</li> <li>Cyber security knowledge</li> <li>Experience in data analysis and artificial intelligence applications</li> </ul>	Female / Male	Positive	Positive



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**Table 87.** Sectors in Need of Labor Force and Required Labor Force Characteristics

Sector	Labor Shortage	Causes Of Labor Shortage	Expected Qualifications	Gender Preference	Attitudes Towards Vulnerable Groups	Attitudes Towards Formal Employment
<b>Logistics and Foreign Trade</b>	<ol style="list-style-type: none"> <li>1. Sales-Marketing Personnel</li> <li>2. Logistics Elements</li> <li>3. Chauffeur</li> <li>4. Forklift Operators</li> </ol>	<ul style="list-style-type: none"> <li>With the expansion of international trade, the insufficiency of foreign language-speaking personnel, the lack of vocational training in the field of logistics, and the fact that those working in the sector do not stay in employment for a long time lead to labor shortages.</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge of office software (such as Excel, Word)</li> <li>To be educated in the field of foreign trade,</li> <li>Arabic and English</li> </ul>	Female / Male	Positive	Positive
<b>SPP and Air Conditioning</b>	<ol style="list-style-type: none"> <li>1. Air conditioning maintenance technicians</li> </ol>	<ul style="list-style-type: none"> <li>Due to intensive and irregular working hours, heavy workload and inadequate wage policies, employees in the sector are constantly changing jobs and turning to other sectors, resulting in labor shortages.</li> </ul>	<ul style="list-style-type: none"> <li>Qualified and specialized workforce</li> </ul>	Female	Positive	Positive

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