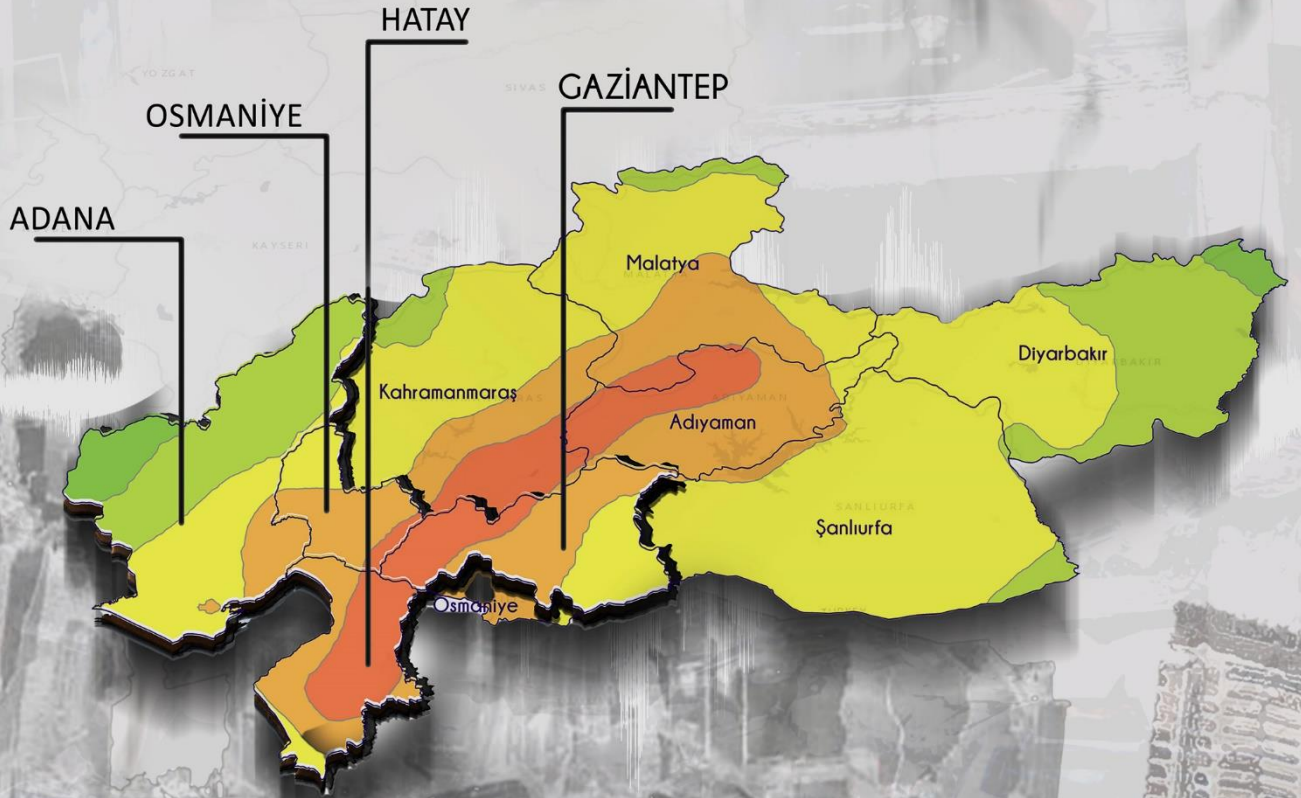


# *Sustainable Workforce Recovery in the Earthquake Region: Needs and Opportunities*

Field Survey and Results by TEPAV

July 2023



**tepav**

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July, 2023

Ankara, Türkiye

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## Executive Summary

**The earthquake zone is home to one-fifth of the total population and generates almost 10 percent of Türkiye's GDP.** The powerful twin earthquakes that struck Türkiye on February 6, 2023 caused massive destruction in a wide geography covering Southeastern Anatolia, Eastern Anatolia, Central Anatolia and the Mediterranean regions. 11 provinces declared as disaster zones are Kahramanmaraş, Adana, Adıyaman, Diyarbakır, Gaziantep, Hatay, Kilis, Malatya, Osmaniye, Şanlıurfa and Elazığ. The population of the provinces in the region is 14.1 million, making up 16.5 percent of the total population. The national income share of the provinces in the earthquake zone is 9.3 percent and approximately 2/3 of the activities in the region are in the services sector. The export share of the region is 8.4 percent and the import share is 7 percent where the foreign trade activities mainly take place in Gaziantep, Hatay and Adana.

**Early data reveal that 40 percent of the total building stock was damaged or destroyed at various levels and there is a substantial loss of workplaces and workforce.** It is estimated that the earthquake had different effects among the 11 provinces in the region, and that 40 percent of the total building stock was damaged or destroyed at various levels. The analyses show that Adıyaman, Hatay, Malatya and Kahramanmaraş were the cities most badly hit due to the earthquake. The Social Security Institution (Sosyal Sigortalar Kurumu - SGK) data based on May 2023 declarations in 11 provinces located in the earthquake zone show that the number of wage earners decreased by 23.6 percent (446 thousand) and the number of workplaces decreased around 30.2 percent (more than 66 thousand), in which the declines exceeded 50 percent in Adıyaman, Hatay, Malatya and Kahramanmaraş. With the employment support provided after the earthquake, applications for unemployment benefits and short-time working allowances increased significantly in the earthquake-hit provinces. In the January-March 2023 period, applications for unemployment benefits in 11 provinces in the earthquake zone increased by 36.4 percent compared to the same period of the previous year, with the fastest increases in Adıyaman (114.6%), Hatay (113.9%), Kahramanmaraş (110.5%) and Malatya (82.7 percent). The number of beneficiaries of the short-time working allowance increased by about 100 thousand after the earthquake. Calculated together with the unemployment applications in the earthquake region, it constitutes 12.3 percent of the total paid employment.

**TEPAV pursued a rapid field survey on workforce assessment in the disaster zone provinces to explore potentials for developing human capital support initiatives to help businesses and municipalities resuming and/or maintaining their operations.** The survey with the questionnaire designed to identify the workforce needs by sectors in terms of the jobs in demand and skills needs/gaps related to those jobs, was conducted in Adana, Gaziantep and Hatay which are the top three cities with the highest number of employees and workplaces in the earthquake region (the coverage was further extended to Osmaniye). In addition, interviews were held with the officials of the municipalities and their subsidiaries, and the development agencies of the related provinces, about the damage to buildings, workplaces and infrastructure, and loss of workforce, together with gathering information on the urgent measures and their support needs.

**Within the scope of the field survey, 288 business representatives in 26 districts of Adana, Osmaniye, Hatay and Gaziantep were interviewed between 11-14 April 2023.** Participants were mostly the members of the Chambers and/or Commodity Exchanges of the respective provinces. Nearly half of the interviews were held in Hatay and its districts, which were most severely affected by the earthquake. Interviews in the central of the provinces were carried out in the field, face-to-face, and the ones in the affiliated districts were mostly conducted via telephone conversations. Manufacturing and wholesale-retail trade sectors constitute the largest sectors with shares of 20 percent each, while 77 percent of the enterprises interviewed were micro enterprises.

**The responses reveal that the number of employees decreased by 28 percent in total of the 4 provinces where all the sectors in Hatay are the hardest hit by the earthquake.** There were significant decreases in other provinces, especially in the sectors of textile and non-textile industry, construction and agriculture. More than 40 percent of personnel in Hatay left, migrated or died due to the earthquake. In Adana, Osmaniye and Gaziantep, current and forthcoming beneficiaries of the Retirement Age Victims (Emeklilikte Yaşa Takılanlar - EYT)<sup>1</sup> consist of 7-8 percent of the total workforce, indicating a strong potential for a significant pressure on the labor market in the near future. In addition, the beneficiaries of EYT are high in number and it is an important factor that will further increase the labor shortage especially in Adana, Osmaniye and Gaziantep. However, EYT-induced retirees have the potential of experienced labor available to work. They can be targeted as a group that can fill the gap of experienced personnel who can adapt quickly in earthquake zone workplaces if necessary and if appropriate conditions are met.

**Nearly 60 percent of the companies interviewed in the textile, construction and services sectors in Hatay reported that they suspended their activities. The expected time for recovery in those sectors exceeds 7 months and pessimism increases as the scale of the firms gets smaller.** In Gaziantep, approximately 30 percent of the firms in the construction and wholesale-retail trade sectors have reported closure and/or suspension of businesses. The non-operative firms are mostly micro and small scaled. As firm scale gets smaller, recovery prospects worsen; while the recovery expectation is 9 months in micro scales, it regresses to 3.5 months in medium scales.

**The most demanded positions in all provinces, and for all businesses of different scale are technical staff.** Almost half of the interviewed companies reported demand for technical staff. The highest shares in total vacancies for technical staff were listed in Adana and Osmaniye, with 92 percent and 82 percent, respectively. Breakdown by sectors reveal that for all the sectors except wholesale and retail trade in Adana, the entire demanded positions are for technical staff. The same is valid for Gaziantep except in non-textile manufacturing and agriculture sectors.

**By occupations, almost half of the job requirements are for the technical staff in manufacturing, agriculture and sales-marketing sector and/or departments.** There is a wide range of sub-categories for occupations especially for manufacturing and construction staff, but machine operator is the most frequently stated occupation. In agriculture, unskilled worker is the most demanded position and packaging is also an area where there is a shortage of personnel. Sales - marketing and accounting are the departments with highest need for labor and work experience where communication skills are prominent qualifications. Most of the personnel required in transportation and storage jobs are for small and micro enterprises and almost all of them stated driver posts. The service sector generally includes the accommodation and restaurant activities. Therefore, professions such as waiter, cashier and certified staff such as cooks are indicated. Personnel who can speak a foreign language and can use computers were among the preferences in almost every group.

**Physical damage and loss of workforce are the leading constraints limiting business activities especially in Hatay.** The respondents mostly in Hatay declared the heavy damage of the earthquake to the workplaces

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<sup>1</sup> "Retirement Age Victims" is a problem caused by the amendment in the Social Security Law, which was in effect as of 8 September 1999. The change was the addition of the age requirement to the number of premium days and insurance period, which were the preexisting conditions of retirement. Before the amendment, individuals who fulfilled the insurance period of 20 years for women and 25 years for men, as well as 5000 days of premium, could retire. In this case, for example, a woman who started her working life at the age of 20 could retire at the age of 40, while a man who started his working life at the same age could retire at the age of 45. In the 1999 amendment to the law, the retirement age was determined as 58 for women and 60 for men. In 2008, the conditions were further aggravated and the retirement age was raised to 65 for those who would start working as insured for the first time. With the latest amendment made in the law on 3 March 2023, the age requirement was abolished for people who had insurance before 1999.



and stores as well as the loss of their machinery-equipment, products and stocks. In addition to the physical damage, there was a significant loss of employment due to the death and displacement of workforce. Especially in agriculture sector, it is the most essential problem requiring urgent action. The delays in the zoning plans prevented the solution of infrastructure and superstructure problems, and thus logistics problems continue which further disrupts the supply chain. In addition, the payment system is blocked in the region with the significant amount of checks that have expired and have not been paid and any financial support provided is very short-term and limited.

**The share of female employment is lower than Turkey's average in all the provinces in the region and the contraction was at a much larger scale after the earthquake particularly in districts where the damage is high.** In the provinces where the survey was conducted, the share of female employment is 27.8 percent which is less than the Turkish average of 33.6 percent by March 2023 SGK figures. After the earthquake, workforce losses were higher for females compared to male employment and the most prominent example was in Hatay with a level of over 70 percent contraction in female workforce, and thus, the employment share of women workers decreased by 6.7 points. In the interviews with the Metropolitan Municipality and its subsidiaries, the authorities confirmed the sharp and larger losses in female employment and that they were not called back to work due to the acute housing problems.

**Recommended support measures vary according to the extent of the damage and the field of business activities.** Removal of the debris, rapid maintenance and repair works, provision of container workplaces and warehouses, compensation of the loss of workforce due to displacement, death or psychological trauma are among the most fundamental and urgent needs in Hatay where the damage is heaviest. Infrastructure and housing problems for the employees and their families should be solved immediately. It is considered critical to provide new workplaces and offices and establish container cities close to industrial zones. Urban plans should include social facilities such as schools, childcare centers and bazaars in line with the cultural settlement patterns. Financing requirements should be met urgently and accessing to Credit Guarantee Fund (Kredi Garanti Fonu – KGF) is strongly demanded by the participants. In addition, measures such as social insurance payment and salary supports that will motivate the employees to live in the region are considered critical. Exemptions and exceptions for taxes or the cancellation of debts will be very important steps from the employer point of view in the region.

**A closer sectoral review displays shoemaking and textiles are the prominent sectors in Gaziantep and leather in Hatay. These sectors are employment intensive and constitute the groups mostly affected by the earthquake.** Projects to alleviate the labor shortage and meet skill needs in these areas should be supported and/or new projects should be developed. A collaboration with the local offices of Turkish Employment Agency (İŞKUR) can be developed to employ personnel with the required qualifications, and/or cooperation with universities, vocational training centers and high schools can be developed to close the labor shortage in related sectors including agricultural production. Purchases through “social procurement model” should be motivated and widened.

**Projects providing job guarantees to those who volunteer to receive vocational training in order to work in sectors with a labor shortage, and succeeding in obtaining certificates are important.** In this context, the Field Survey revealed several occupational groups that have a labor shortage in the respective provinces in which the enterprises listed and/or the municipalities and the development agencies indicated in the interviews. The detailed list of workforce demand by occupations in each province and according to scale is provided in Annex 4.

**Recycling of waste and construction are activities that have intensified in the region after the earthquake.** Financing subsidies with employment requirement conditions can be provided to employers to increase the

capacity of existing demolition waste recycling facilities and/or for the establishment of new facilities. The demand for construction workers is highest -especially in Hatay- with several occupations varying from molders to civil engineers and architects. Training can be provided for the personnel to be employed in the recycling of demolition wastes extracted. Funding can be provided for training and certificate programs that provide technical and vocational skills for these groups.

**Collaboration with women's cooperatives is important to support and/or increase women's employment.**

Training and capacity building programs can be organized for women's cooperatives on pre-disaster preparedness and post-disaster recovery. In addition, to encourage women's participation in the labor force, it is important to provide nursery and day care center support. Cooperation and partnerships can be established between public institutions, non-governmental organizations, private sector and local governments for training and support programs that include topics such as improving job skills, job search and application process, preparation for job interviews.

**Psychosocial empowerment support programs should be implemented for people affected by the earthquake and who have lost their jobs.** Financial support can be provided to projects aiming to establish Community-Based Psychosocial Support Centers that can provide support such as group therapy, individual counseling, stress management trainings and social activities. Furthermore, it is important to formulate projects that will enable people to return to their jobs after the treatment of those who have experienced post-traumatic disorder because of the earthquake.

**Financial support can be provided to employers in projects that encourage the participation of women and disabled employees.** It is important to make workplaces accessible by women and people with disabilities. Vocational training programs can be organized for people with disabilities to improve their skills and/or gain new skills, and existing activities in this context can be supported. Cooperatives supporting production by persons with disabilities may be established, products may be included in the social procurement program and/or projects within this scope can be supported.

**Cooperation can be developed with regional Development Agencies, local employment organizations or other partners in projects aimed at providing employment in Organized Industrial Zones (Organize Sanayi Bolgeleri – OSB) and Small Industrial Areas (Küçük Sanayi Siteleri-KSS) in the earthquake region.** There are several projects already active by various partner institutions aiming at increasing employment in the earthquake region with a special focus on women, young people and people with disabilities. Therefore, establishing close cooperation and supporting / enhancing ongoing projects will induce efficiency. B2B events aimed at building interactions between businesses and exploring opportunities for collaboration should be supported to boost trade in sectors where trade and employment have been lost due to the earthquake. In this context, cooperation can be established with embassies, chambers and stock exchanges in organizing business conferences and business summits, trade fairs and networking events.

**Responses from the Metropolitan Municipalities and 6 affiliated companies reiterated the need of urgent and comprehensive measures in Hatay and Gaziantep districts of Nurdağı and İslahiye where the damage is most severe.** Hatay Metropolitan Municipality and its subsidiary HATSU reported significant damage to infrastructure and superstructures, and noted serious workforce losses. While Gaziantep Municipality reports that there are similar damages and losses in Nurdağı and İslahiye districts, its subsidiaries Gaziulaş and Gazikültür recorded sharp contractions in the number of employees. In these regions, rapid debris removal, completion of damage assessments and finalizing zoning plans are essential to solve the infrastructure and superstructure problems. In order to ensure the return of the people of the region who have been displaced, the problem of housing should be resolved urgently. It is also considered key to place social facilities in the new urban design in line with cultural patterns of the provinces.

**Adana is one of the least affected cities in the region and thus became a preferred destination for the displaced populations. Therefore Adana Metropolitan Municipality highlights the risk of rapid increase in population. The new settlers from other earthquake provinces as well as the reconstruction activities necessitate comprehensive infrastructure and housing investments, and thus substantial need for funding.** It is proposed to establish a "Crisis Management Center" to tackle not only earthquake risk, but also other threats such as the climate and water crisis which require timely actions. It is considered crucial to develop risk management strategies enabling task distribution and preparation of work plans by establishing a central organization which will manage the activities with the coordination of the relevant institutions and organizations. Workforce loss in Adana Metropolitan Municipality and the subsidiaries is limited, but the number of current and forthcoming beneficiaries of EYT consist a potential risk to the future employment.

**The different reflections of the earthquake in the provinces reveal the necessity of a multidimensional approach by considering the direct and indirect effects in the design of the support packages.** In this context, it is recommended that funding for the investments covering infrastructure and sheltering where the earthquake damage is severe, should be prioritized. In the support of the settlement projects, zoning plans should incorporate the social facilities in line with the cultural patterns. Last but not least, for businesses to return to their pre- earthquake situation, projects to replace the lost workforce, whether by death, migration, injuries, or EYT, must be developed and activated so as to provide the required skills in different sectors, increase employment, and revitalize business activity.

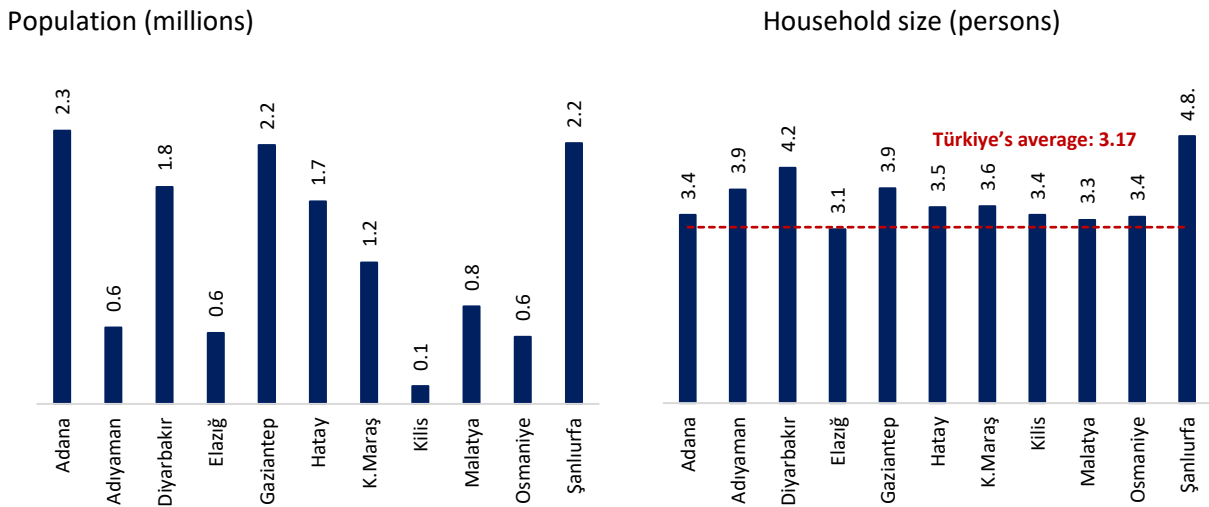
## A. Background

**The twin earthquakes in Kahramanmaraş in February were effective in a wide geography and caused heavy human and material losses.** On February 6, 2023 Kahramanmaraş was the epicenter of two earthquakes measuring 7.7 and 7.6 that were effective in an area covering Southeastern Anatolia, Eastern Anatolia, Central Anatolia and the Mediterranean regions. In aftermath of the earthquakes, due to the heavy destruction and loss of lives experienced, 11 cities including Adana, Adıyaman, Diyarbakır, Gaziantep, Hatay, Kahramanmaraş, Kilis, Malatya, Osmaniye, Şanlıurfa and Elazığ were declared “disaster zones”. As of March 20, 2023, it is officially declared that 50,096 people lost their lives and 107,204 people were injured.

### A.1. Selected Economic Statistics of the Earthquake Region

**11 provinces declared as disaster zones have a significant share in the Turkish economy. The population of these provinces is 14.1 million, which constitutes 16.5 percent of the country’s total population. Adana, Gaziantep and Şanlıurfa constitute the most populous cities with more than 2.2 million residents in the disaster region. Diyarbakır and Hatay are other big cities with their populations of 1.7 million and above. There are 3.6 million households residing in the region and the average household size is above the average of Türkiye which is 3.17. Şanlıurfa (4.9), Diyarbakır (4.2), Gaziantep (3.9), and Adıyaman (3.9) constitute the provinces with the most populous households in the region. The average household size is 3.4 in Adana, and 3.5 in Hatay (Figure 1).**

**Figure 1. Population and household size in earthquake zone provinces (2022)**



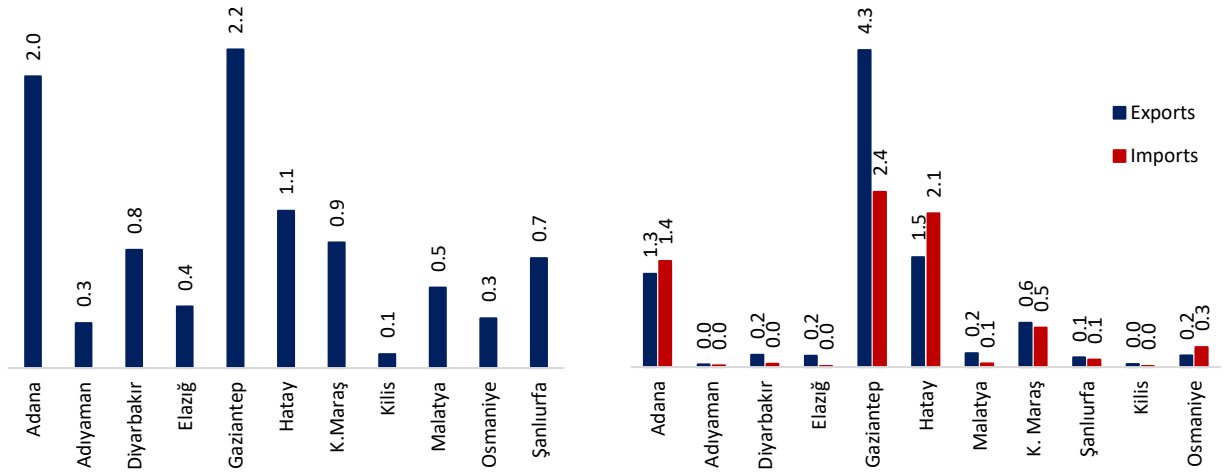
Source: TURKSTAT, TEPAV calculations

**The national income share of the provinces in the earthquake zone is 9.3 percent and the export share is 8.4 percent; Gaziantep, Adana and Hatay constitute the first three provinces with the highest shares.** When the national income shares of the provinces in the earthquake zone are evaluated, it is seen that approximately half of the national income produced in the region is provided by **Gaziantep and Adana**, with a share of 9.3 percent in the total of 11 provinces. Considering the foreign trade volumes, according to the data of 2022, the export share of the region is 8.6 percent and the import share is 7 percent. Half of the region's exports are provided by **Gaziantep; Adana and Hatay** are other provinces with high export volumes. The same is valid for the import shares and volumes (Figure 2).

**Figure 2. Contribution of earthquake zone provinces to economic activity**

National income share (2021, %)

Foreign trade share (2022, %)



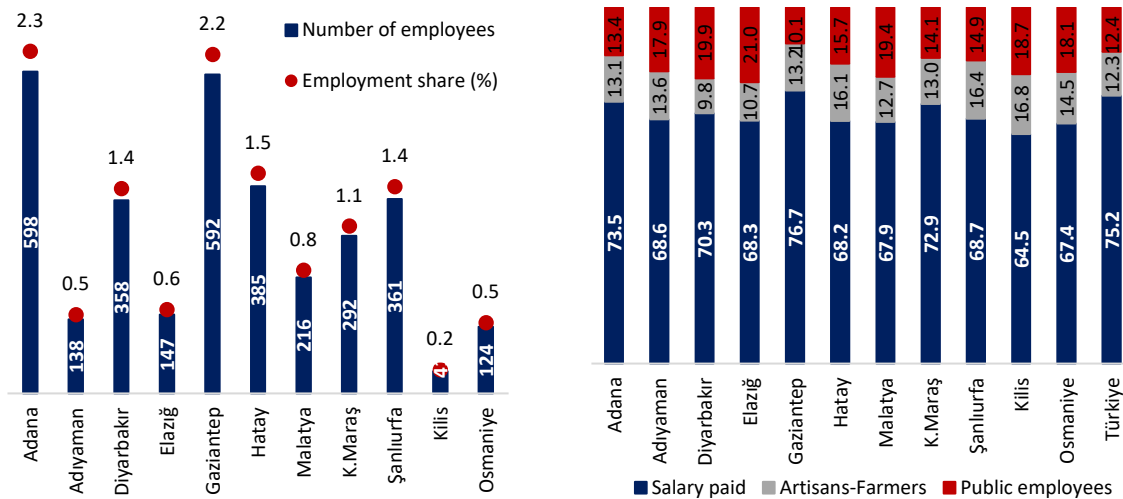
Source: TURKSTAT, TEPAV calculations

The total number of registered workers in the provinces in the earthquake zone is 3.2 million and constitutes 12.3 percent of the total employment. As of the end of 2022, the number of insured wage earners in the provinces located in the disaster zone is 2.3 million, the number of artisans-farmers is 437,000, and the number of public employees is 494,400. When compared to the country's averages, it is observed that the shares of artisans-farmers and public employees are higher in the earthquake zone. Total number of registered employees is 598,000 in **Adana**, 592,000 in **Gaziantep** and 385,000 in **Hatay**; these provinces employ the highest number of registered workers in the region (Figure 3).

**Figure 3. Employment in the provinces of the earthquake zone (2022)**

Number of employees and employment share

Employee class shares (%)

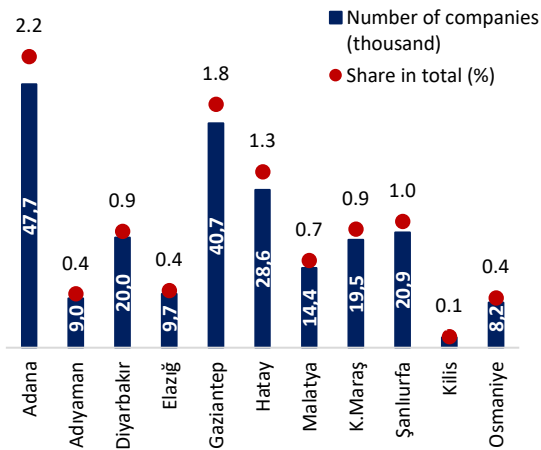


Source: SGK, TEPAV calculations

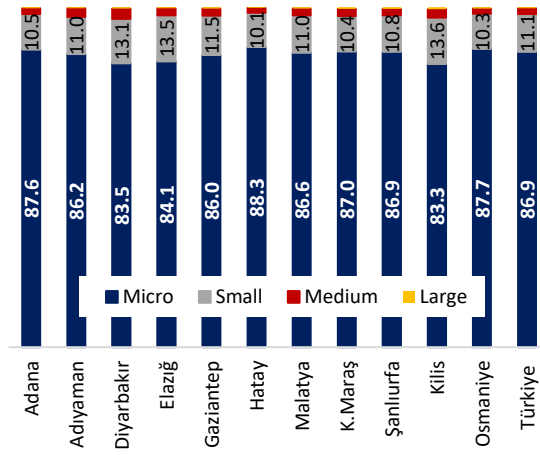
The number of registered companies in the earthquake zone is 220,588 and its share in the country's total is 10 percent. When SGK data is analyzed as of the end of 2022, it is seen that more than half of the companies in 11 provinces declared as disaster zones are registered in **Adana, Gaziantep and Hatay**, making up 10 percent of Türkiye's overall with 220,558 in total. When the distributions are analyzed according to their scales, 86.6 percent of the enterprises in the region are micro-scale enterprises with less than 10 employees, in parallel with the country in general. The share of small-scale enterprises with 10-49 employees is 11.1 percent, the share of those employing 50-249 employees is 2 percent, and the share of large enterprises with more than 250 employees is limited to 0.4 (Figure 4).

**Figure 4. Companies in earthquake zone provinces (2022)**

Number of companies and their shares in total



Shares of companies by scale (%)

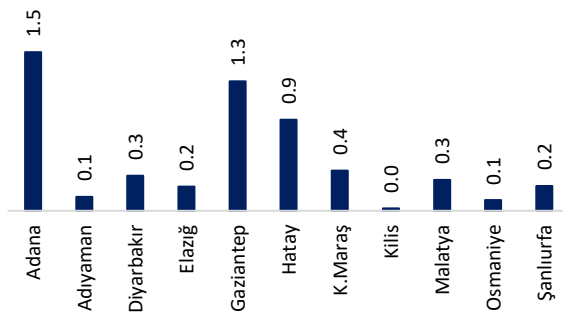


Source: SGK, TEPAV calculations

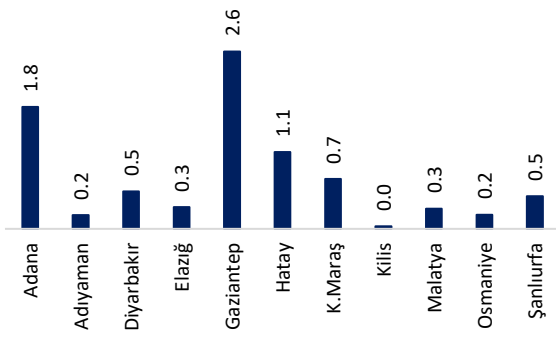
**2/3 of the deposits and loan utilization of the earthquake region are registered in Adana, Gaziantep and Hatay.** Turkish Banking Association (Türkiye Bankalar Birliği – TBB) data on provinces indicate that 5.5 percent of the deposits of the Turkish banking sector are owned by the individuals and/or companies of the 11 provinces in disaster zones. **Adana, Gaziantep and Hatay** are the provinces having the largest shares. In the use of loans, the region constitutes 8.2 percent of the banking sector total. Similarly, **Gaziantep, Adana and Hatay** are the top three cities in credit usage. In general, credit utilization of earthquake zone provinces have a weight above deposit ownership (Figure 5).

**Figure 5. Loan and deposit rates in earthquake zone provinces (2021, %)**

Deposits



Credits



Source: TBB, TEPAV calculations

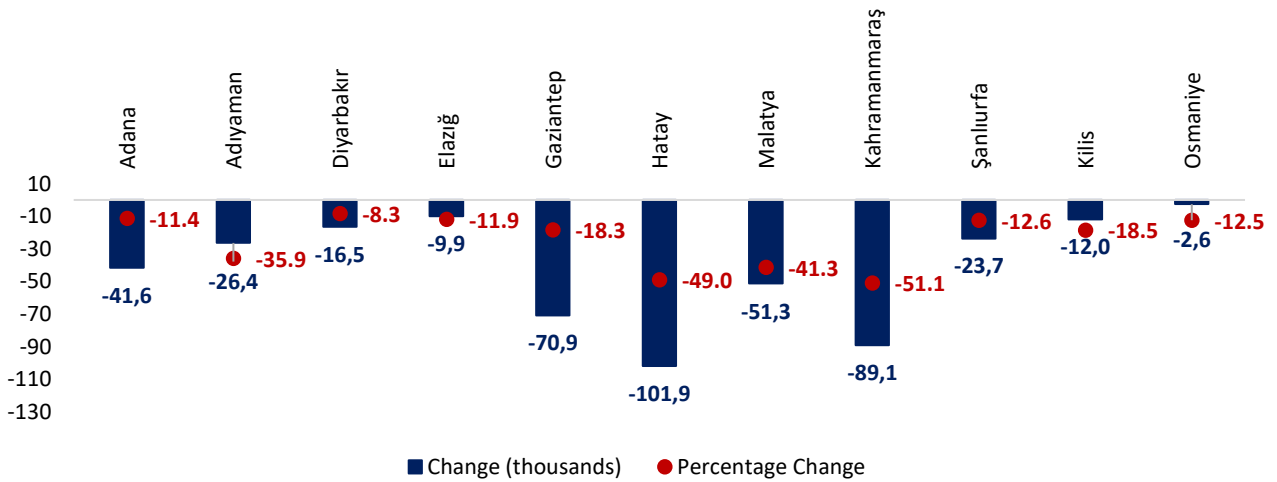
## A.2. Loss of Workforce and Damaged/Destroyed Workplaces

**Social Security Institution (Sosyal Sigortalar Kurumu - SGK) data contain information about the loss of workforce and damaged/destroyed workplaces in the earthquake zone.** A state of force majeure was declared for the provinces in the earthquake zone, and all kinds of information, documents and declarations that should be submitted between February 6 and April 30 were postponed until May 26, 2023. SGK published March 2023 statistics of insured wage earners on 31 May 2023, the data contain important information about the current loss of workforce due to destruction, damage and migration in the earthquake region.

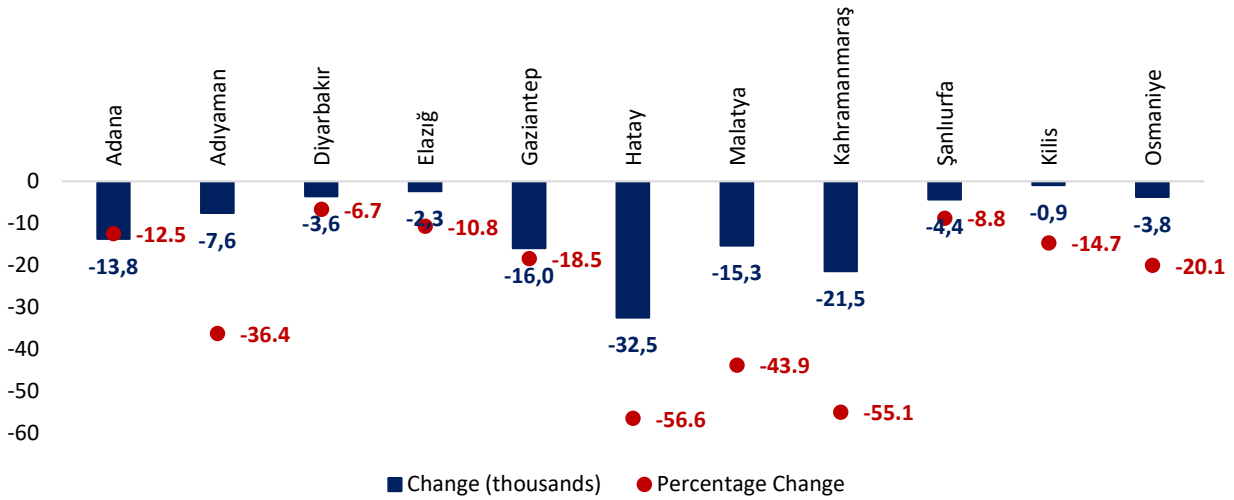
**As of March 2023, the number of wage earners in 11 provinces located in the earthquake zone decreased by 445,943 compared to the end of 2022; the decline is 23.6 percent.** Compared to December 2022, Kahramanmaraş and Hatay are the first two provinces with the largest decline in the workforce; Kahramanmaraş with 89,100 (51.1 percent) and **Hatay** with 101,900 (49 percent). They are followed by **Gaziantep** with 70,900 (18.3 percent), Malatya 51,300 (41.3 percent) and **Adana** with 41,600 (11.4 percent). The respective contractions in female workforce are as follows; 55.1 percent in Kahramanmaraş, 56.6 percent in Hatay, 18.5 percent in Gaziantep, 43.9 percent in Malatya and 12.5 percent in Adana. Especially in Kahramanmaraş and Hatay, it is noteworthy that female employment was affected more negatively (Figure 6).

**Figure 6. Insured wage earners in earthquake zone provinces (December 2022-March 2023)**

Total employment



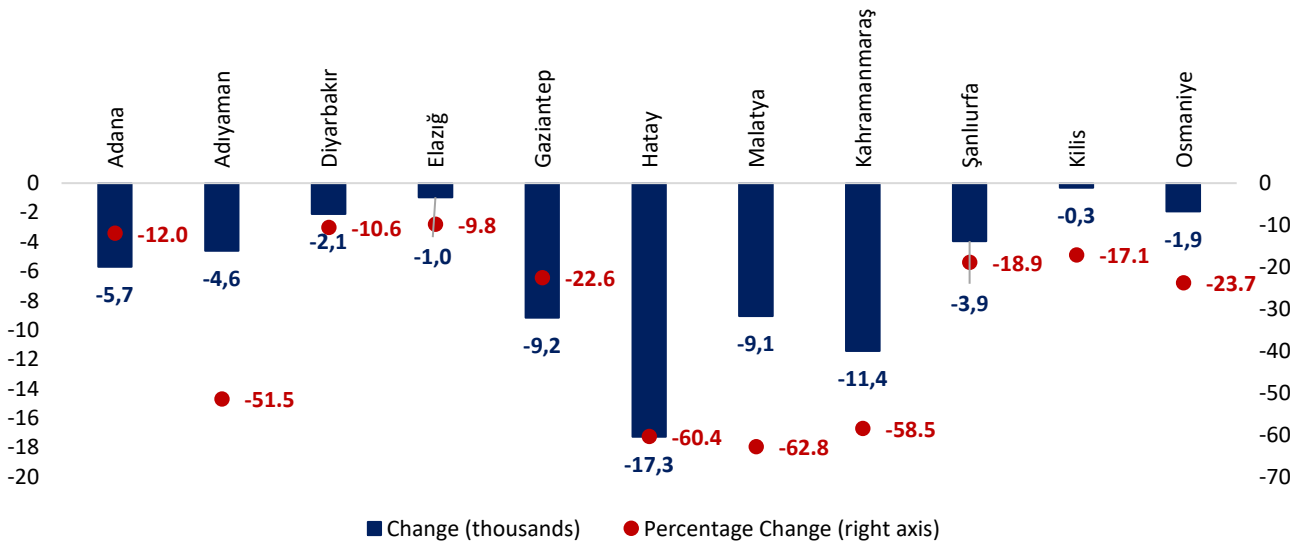
## Female employment



Source: SGK, TEPAV calculations

After the earthquake, the decrease in the number of workplaces in 11 provinces is above 66,000; the decline in Kahramanmaraş, Hatay, Adıyaman and Malatya is above 50 percent. These provinces are followed by Osmaniye and Gaziantep, with a decrease of 23.7 percent and 22.6 percent respectively, in the registered company numbers. Insurance declarations of 11,439 enterprises in Kahramanmaraş (declined by 58.5 percent) and 17,280 enterprises in Hatay (declined by 60.4 percent) were not submitted. In Malatya and Gaziantep, the decrease in the number of declarations is close to 10 thousand, in Adıyaman it is 4,611 and in Adana it is 5,709. In Diyarbakır and Elazığ, the decrease in the number of enterprises is below 3 percent (Figure 7).

Figure 7. Number of workplaces in earthquake zone provinces (December 2022-March 2023)



Source: SGK, TEPAV calculations



With the employment support provided after the earthquake, applications for unemployment benefits and short-time working allowances increased significantly in the earthquake-hit provinces.<sup>2</sup> In the January-March 2023 period, applications for unemployment benefits in 11 provinces in the earthquake zone increased by 36.4 percent compared to the same period of the previous year, with the fastest increases in Adiyaman (114.6%), Hatay (113.9%), Kahramanmaraş (110.5%) and Malatya (82.7 percent). In this period, the overall increase in Türkiye was 4.9 percent. On the other hand, when the ratio of unemployment benefit applications to the insured-paid employment of the relevant province is analyzed, it is seen that all earthquake provinces except Adana are above the average of Turkey (3.4%), and the highest ratios are observed in Adiyaman (9.8%), Hatay (9.9%), Kahramanmaraş (12.1%) and Malatya (9.9%) (Table 1).

**Table 1. Applicants and beneficiaries of unemployment benefits in the earthquake zone (January 2022 – March 2023)**

**1.a. Applicants**

	Application for Unemployment Benefit (January-March 2022)	Application for Unemployment Benefit (January-March 2023)	Annual Change (%)	Number of insured paid employees (March 2023)	Ratio of those applying for unemployment benefits to the number of insured wage earners
KAHRAMANMARAŞ	4,895	10,306	110.5%	85,342	12.1%
MALATYA	3,939	7,183	82.4%	72,785	9.9%
HATAY	4,895	10,469	113.9%	106,192	9.9%
ADIYAMAN	2,159	4,633	114.6%	47,152	9.8%
ELAZIĞ	3,514	3,299	-6.1%	73,464	4.5%
GAZİANTEP	12,751	13,463	5.6%	315,909	4.3%
OSMANİYE	1,955	2,225	13.8%	52,775	4.2%
DİYARBAKIR	6,599	7,499	13.6%	181,499	4.1%
KİLİS	504	730	44.8%	18,279	4.0%
ŞANLIURFA	4,795	6,106	27.3%	164,513	3.7%
ADANA	10,271	10,865	5.8%	324,772	3.3%
Total of 11 Provinces	56,277	76,778	36.4%	1,442,682	6.5%
Total of Türkiye	440,673	462,386	4.9%	33,705,754	3.4%

**1.b. Beneficiaries**

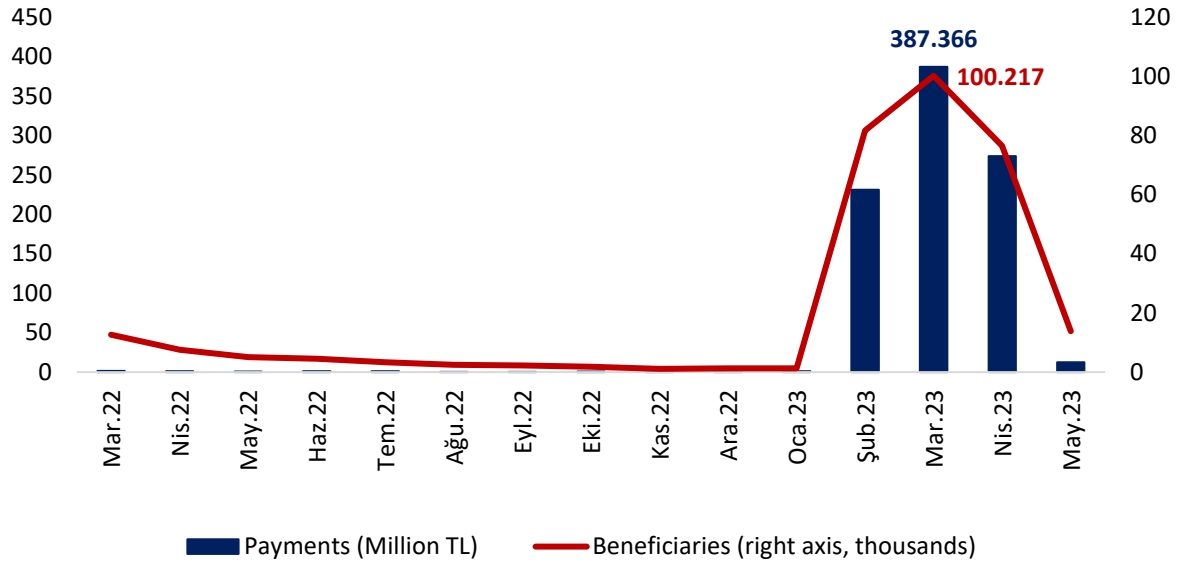
	Beneficiaries of Unemployment Benefit (January-March 2022)	Beneficiaries of Unemployment Benefit (January-March 2023)	Annual Change(%)	Number of insured paid employees (March 2023)	Ratio of those benefiting from unemployment benefits to the number of insured wage earners
KAHRAMANMARAŞ	2,120	2,420	12.40%	85,342	2.84%
ADIYAMAN	979	915	-6.99%	47,152	1.94%
MALATYA	1,595	1,388	-14.91%	72,785	1.91%
HATAY	2,321	1,986	-16.87%	106,192	1.87%
ELAZIĞ	1,518	1,342	-13.11%	73,464	1.83%
OSMANİYE	851	705	-20.71%	52,775	1.34%
GAZİANTEP	5,905	4,102	-43.95%	315,909	1.30%
ADANA	5,067	4,182	-21.16%	324,772	1.29%
DİYARBAKIR	2,819	2,328	-21.09%	181,499	1.28%
KİLİS	207	173	-19.65%	18,279	0.95%
ŞANLIURFA	1,667	1,473	-13.17%	164,513	0.90%
11 İl Toplam	25,049	21,014	-16.11%	1,442,682	1.46%
Türkiye Toplam	216,078	198,926	-7.94%	16,852,877	1.18%

Source: İŞKUR, TEPAV calculations

<sup>2</sup> In cases when the weekly working time of the employee is reduced by at least 1/3 or the activities in the workplace are stopped completely or for at least 4 weeks, he/she can benefit from the short-time working allowance. Short-time working allowance is an application that allows the insured to receive an additional income during the period of non-work, and its duration cannot exceed three months.

The number of beneficiaries of the short-time working allowance increased by about 100,000 after the earthquake. Calculated together with the unemployment applications in the earthquake region, it constitutes 12.3 percent of the total paid employment. The Turkish Employment Agency (İŞKUR) published the short-time working allowance data as of May 2023. Accordingly, the number of beneficiaries of the short-time working allowance was 1,261 in January, it increased to 100,217 in the following two months, and decreased to 13,778 as of May (Figure 8).

**Figure 8. Short-time working allowance (March 2022- March 2023)**



Source: İŞKUR, TEPAV calculations

### A.3. Estimation of Economic Cost of the Earthquake Damage<sup>3</sup>

It is estimated that the earthquake had different effects among the 11 provinces in the region, and that 40 percent of the total building stock was damaged or destroyed at differing levels. The analyses show that Adiyaman, Hatay, Malatya and Kahramanmaraş were the cities most badly hit due to the earthquake. Looking at the building stock, it is seen that the share of undamaged buildings in the provinces in question is less than 40 percent, and this ratio has decreased to much lower levels in Adiyaman, Hatay and Kahramanmaraş. Gaziantep, Kilis and Osmaniye were the second most affected regions by the earthquake, especially İslahiye and Nurdağı districts in Gaziantep were exposed to high levels of destruction. The provinces where the effects of the earthquake are most limited are Elazığ and Adana (Table 2).

**Table 2. Estimated damage and destruction rates in the building stock in the earthquake zone (% building stock)**

a. By provinces					b. Earthquake region in general	
	No Damage	Minor Damage	Moderately damaged	Destroyed or in need of urgent demolition		
Adana	98	1	1	0		
Adiyaman	23	32	6	39		
Diyarbakır	86	12	1	1		
Elazığ	93	4	0	2		
Gaziantep	51	33	4	12		
Hatay	36	31	6	27		
K.Maraş	26	42	3	29		
Kilis	39	46	3	12		
Malatya	36	31	3	30		
Osmaniye	56	32	1	11		
Şanlıurfa	77	21	1	1		

Category	Percentage
No damage	62
Minor damage	23
Moderately damaged	3
Destroyed or in need of urgent demolition	13

Source: Özüdoğru Aydın (2023)

A recent study analyzing the first available data after the earthquake shows that the cost of the redevelopment plan of the region will reach approximately 150 billion dollars over a 5-year period. The loss of life and property in the provinces affected by the earthquake and the costs of housing and maintenance, repair and construction will have significant long-term negative effects on the Turkish economy. It is predicted that public and private construction activities which will be intensified in the coming 3 years constitutes more than 80% of the total financing needs. The rest is the cost of the direct and indirect supports to be given on a household basis in order to protect the living standards of the people. The analysis implies that economic growth in 2023 is expected to be 1.2 points lower than the baseline scenario predicted before the earthquake (Table 3).<sup>4</sup>

<sup>3</sup> This section depends on Özüdoğru Aydın (2023) analysis.

<sup>4</sup> In the report published in March 17, 2023 by the Presidency of Strategy and Budget, total financial burden of the earthquake is estimated as 103.6 billion USD, which is equal to 9% of GDP forecast for 2023. The most prominent component of the burden is the damage in housing units by 54.9% (56.9 billion USD) and the second largest item is the destruction of public infrastructure and damage to public service buildings (12.9 billion USD). The damage incurred by the private sector except housing is estimated at 11.8 billion USD. This category includes manufacturing industry,

**Table 3. 5-year estimated financing for earthquake-related expenses (billion USD, 2023 prices)**

	2023	2024	2025	2026	2027	TOTAL
Construction costs	22	24	20	13	9	88
Loss of property	5	12	12	5	1	35
Temporary accommodation	4	1	0	-	-	5
Household supports	8	4	2	-	-	14
Employment supports	3	2	1	-	-	6
<b>TOTAL</b>	<b>41</b>	<b>43</b>	<b>34</b>	<b>18</b>	<b>10</b>	<b>147</b>

Source: Özüdođru Aydın (2023)

## B. Objectives of the Study

Considering the importance of the earthquake region in the Turkish economy, timely and detailed analysis of the damage and destruction faced by the residents and companies is considered critical in the planning of support packages in a focused and effective manner. Studies carried out in the field and the early data released after the earthquake indicate that due to the heavy damage and demolition, loss of employment is also significant with life losses, injuries, damages on workplaces and internal displacement. Therefore, it is expected that labor supply and demand dynamics in the region will be significantly altered.<sup>5</sup>

TEPAV pursued a rapid workforce assessment study in the disaster zone provinces with the main objective of exploring potential entry points for developing a human capital support initiative to help businesses and municipalities in the region resuming and/or maintaining their operations. The targeted output of the study is the identification of the workforce needs by sectors in terms of the (i) jobs in demand and (ii) skills needs/gaps related to those jobs. The assessment would provide an overall understanding of the human capital needs by regional businesses/municipalities in the aftermath of the earthquake shock, and therefore better inform the inclusive response to be integrated to the investments as part of the delivery of the EBRD's Earthquake Response Package.

In this context, a field survey was conducted to determine the employment and skill losses of workplaces and the required competencies/skills as well as support areas in Adana, Gaziantep and Hatay, which are the top three cities with the highest number of employees and workplaces in the earthquake region (and Osmaniye being one of the largest districts of Adana before it got the status of province). In addition, municipalities and their subsidiaries, along with the related development agencies of these provinces were contacted and asked about the damage to buildings, workplaces and infrastructure, and loss of workforce together with the urgent measures and their support needs.

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energy, communications, tourism, healthcare, education sectors and damage to small tradespersons and houses of worship.

<sup>5</sup> ILO (2023).

## C. TEPAV Field Survey on Workforce Assessment in the Affected Region

### C.1. Methodology and the Scope of the Survey

Within the scope of the field survey, 288 business representatives in 26 districts of Adana, Osmaniye, Hatay and Gaziantep were interviewed between 11-14 April 2023. The survey sample was based on SGK micro data on the registered number of employees by sectors in the relevant provinces. However, the time constraint of the study and low motivation of the participants to respond, due to the severe psychological impacts of the earthquake, limited the scope and the conduct of the survey. In order to carry out an accurate and fast field work, TEPAV team directly contacted the Chamber and Commodity Exchange officials and prepared a list of participants among their members who were willing to meet and/or contribute to the survey (Table 4).

Table 4. Number of interviews held in provinces and districts

Distribution of provinces and districts				Distribution of provinces (%)
Province	Affiliated District	Number of Interviews	TOTAL	
Hatay	Antakya	58	136	
	İskenderun	28		
	Kırıkhan	13		
	Reyhanlı	11		
	Erzin	11		
	Dört Yol	5		
	Arsuz	4		
	Narlıca	1		
	Altınözü	2		
	Yayladağı	2		
	Samandağ	1		
Gaziantep	Center	5	70	
	Şehitkamil	32		
	Nizip	21		
	İslahiye	5		
	Şahinbey	5		
	Oğuzeli	1		
	Nurdağı	1		
Adana	Center	10	63	
	Ceyhan	21		
	Kozan	17		
	Sarıçam	8		
	Yüreğir	6		
	OSB	1		
Osmaniye	Center	18	19	
	Düzici	1		
<b>TOTAL</b>		<b>288</b>	<b>288</b>	

Source: TEPAV

Nearly half of the interviews were held in Hatay and its districts, which were most severely affected by the earthquake. 136 interviews were held in Hatay, 70 in Gaziantep and 63 in Adana. The scope was expanded by 19 interviews from Osmaniye to obtain the information of the businesses that have suffered damage and lost their workforce. Interviews in the central of the provinces were carried out in the field, face-to-face, and the ones in the affiliated districts were mostly conducted via telephone conversations. In the survey, the questionnaire covers sections on the profile information of the companies, their workforce composition and demand for required jobs by functions, necessary competencies/skills and support areas. In addition, questions were asked to the municipalities and their subsidiaries along with the related development

agencies of these provinces, about the earthquake damage to buildings, infrastructure and loss of workforce, and information about the issues awaiting urgent measures and their support needs were compiled (Table 4 and Annex 1. Survey Questionnaire)

**Non-textile manufacturing and wholesale-retail trade sectors constitute the first two sectors interviewed with shares of 20 percent each.** Services, agriculture-forestry and construction were represented in the interviews with their shares of 10 percent or more while textile and transport-storage with the respective shares of 8 and 6.6 percent. In information and communications sector, surveys could only be conducted with 2 companies in Hatay, so its weight was limited to 0.7 percent. Sectoral distributions differ between provinces: Wholesale and retail trade in Hatay and Osmaniye, industry in Gaziantep and agriculture - forestry in Adana were the sectors with the highest number of interviews (Table 5).

**Table 5. Sectoral distribution of the interviewed enterprises**

Sector / Province	Hatay	Gaziantep	Adana	Osmaniye	TOTAL	Shares in total (%)
Industry (except textile)	20	24	13	1	58	20.1
Wholesale and Retail	27	9	11	10	57	19.8
Agriculture, Forestry, Fisheries	16	9	19	4	48	16.7
Services	22	12	6	2	42	14.6
Construction	20	7	7	1	35	12.2
Textile	11	7	4	1	23	8.0
Transport and Storage	16	2	1	0	19	6.6
Information and Communications	2	0	0	0	2	0.7
Other	2	0	2	0	4	1.4
<b>TOTAL</b>	<b>136</b>	<b>70</b>	<b>63</b>	<b>19</b>	<b>288</b>	<b>100</b>
<b>Shares in total (%)</b>	<b>47.2</b>	<b>24.3</b>	<b>21.9</b>	<b>6.6</b>	<b>100</b>	

Source: TEPAV

**Micro and small-scale enterprises constitute 77 percent of the interviewed enterprises.** 17 percent are medium-sized enterprises and 6 percent are large-scale enterprises. Sectoral breakdown reveals the same distribution indicating the micro-scale enterprises as the most dominant class, except for non-textile manufacturing and textile sectors. On the basis of provinces, highest number of the surveys were conducted with micro-enterprise owners in all the provinces other than Gaziantep (Table 6 and Table 7).

**Table 6. Distribution of the interviewed enterprises according to their sectors and scales**

Sector / Size (number of employees)	Micro (1-9)	Small (10-49)	Medium (50-249)	Large (>250)	TOTAL	Shares in total (%)
Industry (except textile)	13	21	16	8	58	20.1
Wholesale and Retail	29	18	9	1	57	19.8
Agriculture, Forestry, Fisheries	25	13	5	5	48	16.7
Services	24	8	9	1	42	14.6
Construction	21	12	1	1	35	12.2
Textile	7	9	5	2	23	8.0
Transport and Storage	9	7	3	0	19	6.6
Information and Communications	0	2	0	0	2	0.7
Other	3	0	1	0	4	1.4
<b>TOTAL</b>	<b>131</b>	<b>90</b>	<b>49</b>	<b>18</b>	<b>288</b>	<b>100</b>
<b>Shares in total (%)</b>	<b>45.5</b>	<b>31.3</b>	<b>17.0</b>	<b>6.3</b>	<b>100</b>	

Source: TEPAV

**Table 7. Distribution of the interviewed enterprises according to their provinces and scales**

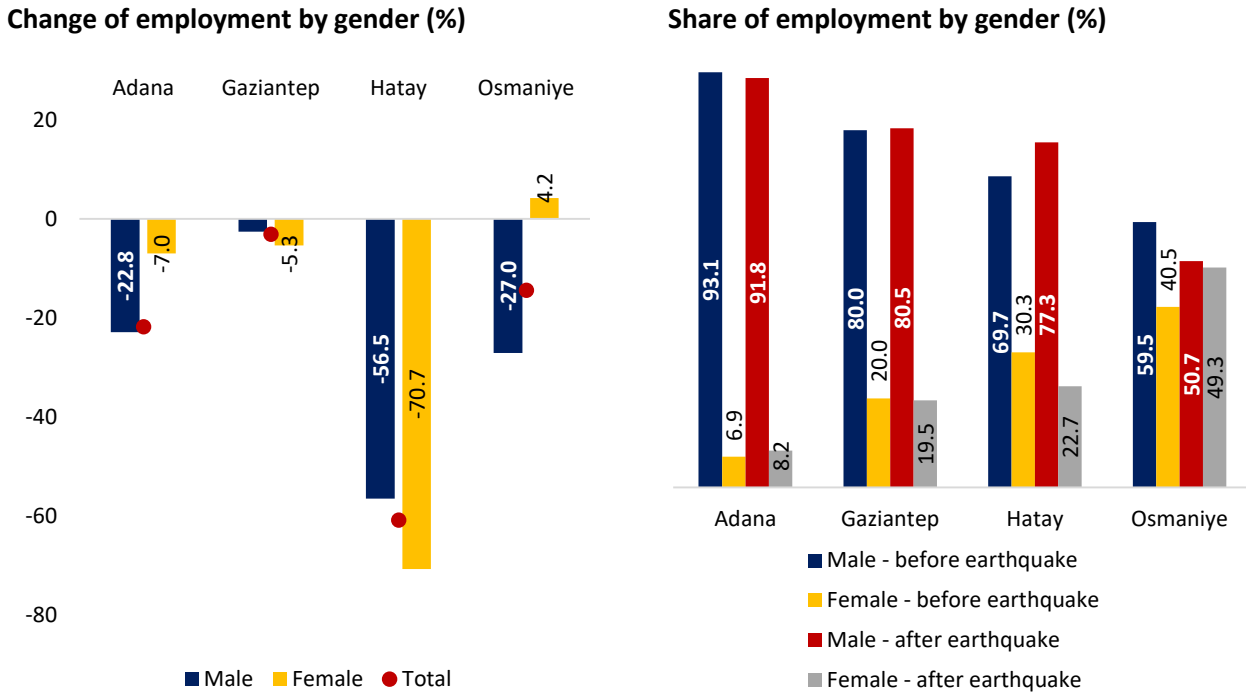
Sector / Size (number of employees)	Micro (1-9)	Small (10-49)	Medium (50-249)	Large (>250)	TOTAL	Shares in total (%)
Hatay	67	40	22	7	136	47.2
Gaziantep	25	31	11	3	70	24.3
Adana	30	12	13	8	63	21.9
Osmaniye	9	7	3		19	6.6
<b>TOTAL</b>	<b>131</b>	<b>90</b>	<b>49</b>	<b>18</b>	<b>288</b>	<b>100</b>
<b>Shares in total (%)</b>	<b>45.5</b>	<b>31.3</b>	<b>17.0</b>	<b>6.3</b>	<b>100</b>	

Source: TEPAV

## C.2. Survey Results

After the earthquake the contraction of the workforce is 28 percent where Hatay is affected the most with a decline of 60.8 percent in the number of employees and gender distribution is further distorted. Survey question number 2 breaks down the employment data according to gender, those over 50 years of age, and disabled. In addition, information about the causes of the loss of labor such as death, relocation or loss of motivation due to psychological motives are also compiled. The responses reveal that the number of employees decreased by 28 percent in total of the 4 provinces where the number of female workers in Hatay contracted more than 70 percent and male workers by 56.7 percent. The lowest change is observed in Gaziantep attributed to the low representation of İslahiye and Nurdağı districts which suffered the most damage out of the 70 interviews conducted throughout the province. Responses regarding gender distribution show that male employees predominate in all provinces, with the highest share of over 90 percent in Adana, and the lowest with a share of 60 percent in Osmaniye. After the earthquake, the employment share of women decreased by 6.7 points in Hatay and 0.5 points in Gaziantep. It increased in Adana and Osmaniye; the 9-point increase in Osmaniye is particularly prominent (Figure 9).

**Figure 9. Workforce of the interviewed enterprises: Gender distribution and the impact of the earthquake**



Source: TEPAV

The employment in the manufacturing, textile and agriculture sectors are the hardest hit by the earthquake, agriculture being mostly hit in Hatay. When we analyze the employment change in the sectors after the earthquake comparatively across the regions, it is seen that the textile and non-textile industry in Adana; construction, transport and storage, and agriculture in Gaziantep; all sectors, and especially agriculture in Hatay; agriculture and non-textile industry in Osmaniye are the sectors that were hit severely with the earthquake (Table 8).

**Table 8. Workforce of the interviewed enterprises: Sectoral distribution and the negative impact of the earthquake on employment (%)**

	Adana	Gaziantep	Hatay	Osmaniye
Information and communications	0.0	0.0	-15.4	0.0
Services	-1.3	-0.9	-64.0	67.1
Construction	-4.5	-21.7	-66.4	0.0
Industry (except textile)	-26.1	-0.4	-58.8	-71.4
Agriculture, Forestry, Fisheries	-0.5	-10.8	-81.5	-98.5
Transport and storage	0.0	-20.0	-40.4	0.0
Textile	-42.5	-4.8	-38.1	-50.0
Wholesale and retail	-1.0	-2.4	-39.5	-8.1

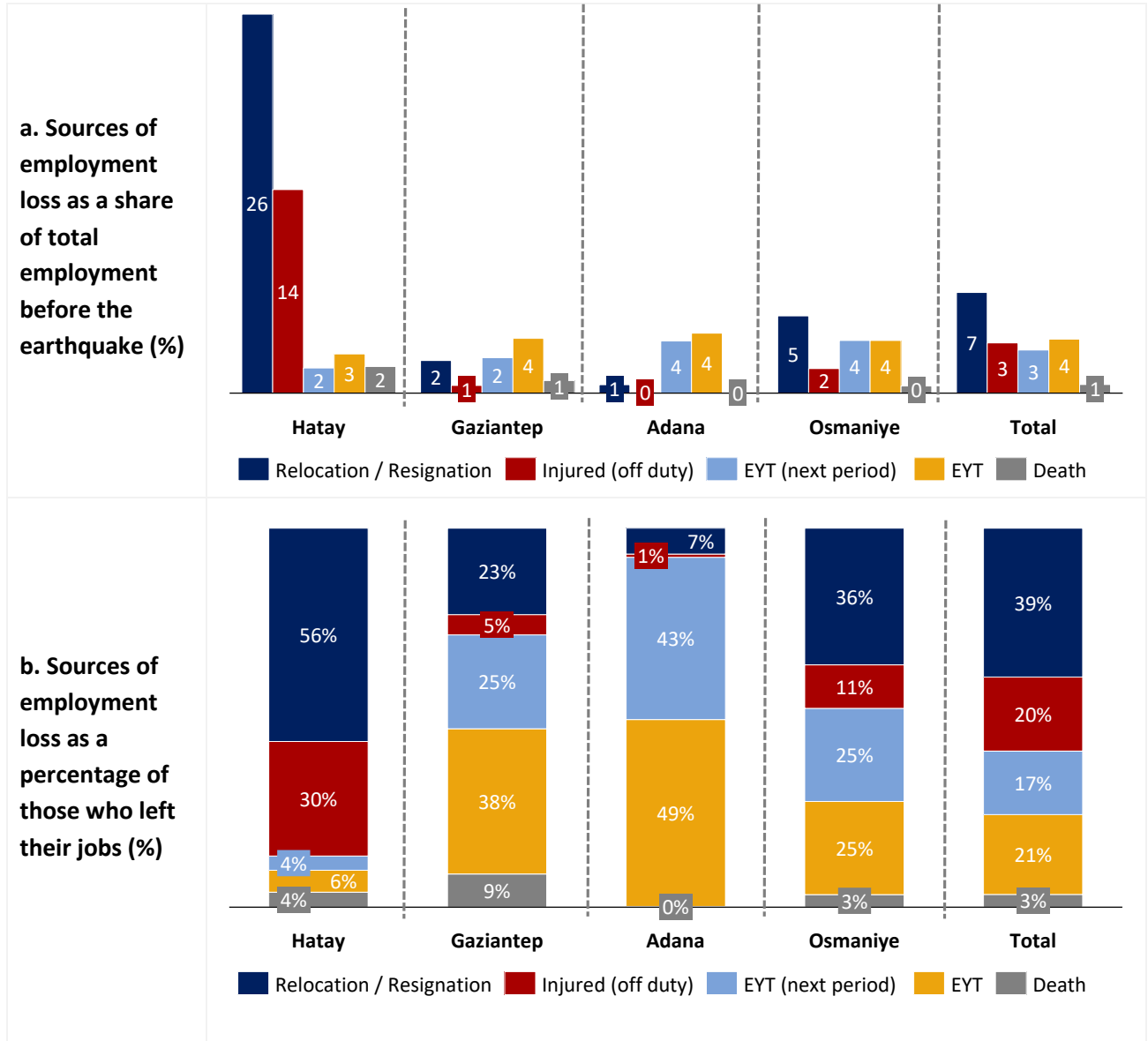
Source: TEPAV

The earthquake in Hatay caused great loss of workforce. In Adana, Osmaniye and Gaziantep, Retirement Age Victims (Emeklilikte Yaşa Takılanlar - EYT) induced retirements reached 7-8 percent. Responses to the sources of labor losses indicate that there are more than 40 percent of personnel in Hatay who left, migrated or died due to the earthquake. In other provinces, the total of these corresponding causes has a share of 3 percent or less. However, data collected via the questionnaire show that the current beneficiaries and



forthcoming beneficiaries of Retirement Age Victims (Emeklilikte Yaşa Takılanlar - EYT) plan will have a negative impact on employed by around 7-8 percent. When the percentage share in those who left their job is taken into consideration, the share of EYT beneficiaries reaches to 92 percent in Adana, 63 percent in Gaziantep and 50 percent in Osmaniye indicating a strong potential for a significant pressure on the labor market in the near future (Figure 10).

**Figure 10. Sources of employment loss (%)\***



Source: TEPAV

\* Total workforce loss is calculated from the statements regarding the total number of workers employed before and after the earthquake. However, there may be inconsistencies in the sum of the reported numbers regarding the dissemination of sources of employment loss. Calculations are based on the statements of the participants.

**Most of the enterprises do not employ disabled personnel.** The weight of disabled personnel is at very low levels, 2 percent and below in non-textile manufacturing and in medium-large enterprises, and furthermore there is no company with disabled employees in the construction, information - communications and transportation - storage sectors. The current regulation is the determining factor in this outcome. The legal framework for the employment of disabled personnel are specified in Article 30 of the Labor Law No. 4857. Employers are obliged to employ three percent disabled people in workplaces where they employ fifty or more workers, and 4 percent disabled people in public institutions (Table 9 and Table 10).

**Table 9. Workforce of the interviewed enterprises: Share of the disabled workers by sector (%)**

	Hatay	Gaziantep	Adana	Osmaniye	Total
Industry (except textile)	0.2	0.6	1.7	0.0	1.2
Agriculture, Forestry, Fisheries	0.1	0.0	0.4	0.0	0.3
Textile	0.0	0.3	0.2	0.0	0.2
Services	0.0	0.2	0.0	0.5	0.1
Wholesale and Retail	0.1	0.0	0.0	1.2	0.0
Construction	0.0	0.0	0.0	0.0	0.0
Information and Communications	0.0	0.0	0.0	0.0	0.0
Transport and Storage	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0

Source: TEPAV

**Table 10. Workforce of the interviewed enterprises: Share of the disabled workers by size (%)**

	Hatay	Gaziantep	Adana	Osmaniye	Total
Large (250 employees or more)	0.3	0.2	2.2	0.0	1.4
Medium (50 to 249 employees)	0.1	0.7	0.2	1.7	0.3
Small (10 to 49 employees)	0.0	0.1	0.0	0.0	0.0
Micro (1 to 9 employees)	0.0	0.2	0.0	0.0	0.0

Source: TEPAV

**The share of personnel aged 50 and over is below 4 percent.** The data on the share of personnel over 50 years of age reveal that they are mostly employed in Adana and in the non-textile manufacturing sector. For this sector, the relative highest rates were also reported in other provinces except in Hatay. By province, other higher rates are reported as 4.6 percent in Adana in agriculture; 2 percent in textile in Gaziantep; 1.9 percent in transportation and storage in Hatay. Considering the scales of the enterprises, the highest shares were reported in medium and large companies, and with lower than 5 percent shares in Adana, Gaziantep and Hatay (Table 11 and Table 12).

**Table 11. Workforce of the interviewed enterprises: Share of workers aged 50+ by sector (%)**

	Hatay	Gaziantep	Adana	Osmaniye	Total
Industry (except textile)	1.1	3.2	4.7	1.5	3.6
Agriculture, Forestry, Fisheries	0.8	0.3	4.6	0.0	2.9
Textile	0.5	2.0	0.8	0.2	0.9
Wholesale and Retail	1.7	0.8	0.1	1.2	0.6
Transport and Storage	1.9	0.1	0.0	0.0	0.5
Services	0.5	1.1	0.1	0.7	0.4
Construction	0.6	0.4	0.0	0.0	0.2
Information and Communications	0.0	0.0	0.0	0.0	0.0
Other	0.2	0.0	0.0	0.0	0.0

Source: TEPAV

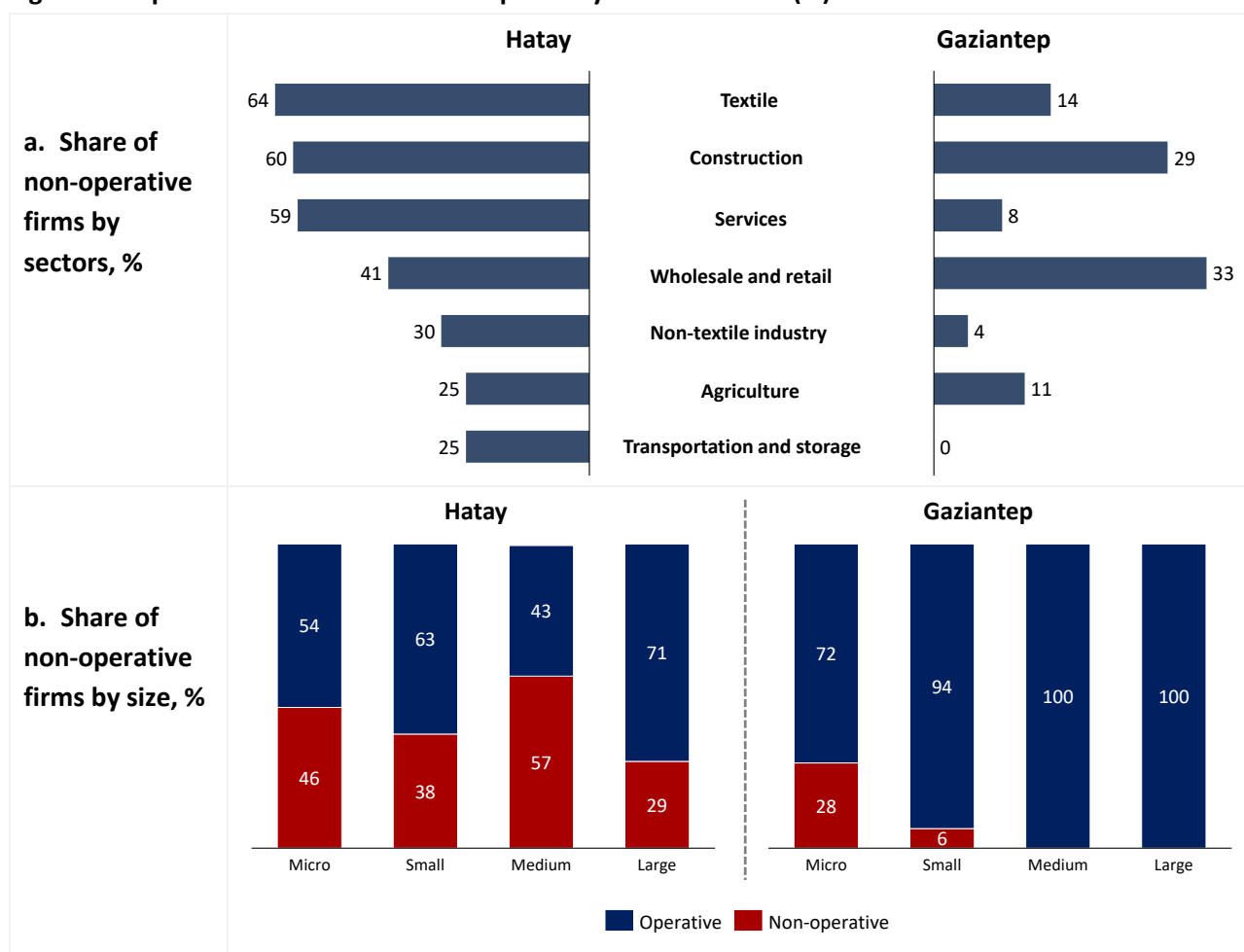
**Table 12. Workforce of the interviewed enterprises: Share of workers aged 50+ by size (%)**

	Hatay	Gaziantep	Adana	Osmaniye	Total
Large enterprises (250 employees or more)	1.0	1.2	8.2	0.0	5.2
Medium (50 to 249 employees)	3.5	4.6	1.7	0.5	2.6
Small (10 to 49 employees)	1.8	1.7	0.3	2.7	0.9
Micro (1 to 9 employees)	1.0	0.5	0.1	0.5	0.4

Source: TEPAV

Nearly 60 percent of the companies interviewed in the textile, construction and services sectors in Hatay reported that they suspended their activities. The non-operative firms are mostly micro and small scaled. In Hatay, proportion of the enterprises reporting that they have suspended their operations is 41 and 30 percent, respectively, in non-textile and wholesale-retail trade sectors. Although non-operation shares are low in Gaziantep, approximately 30 percent of the firms in the construction and wholesale-retail trade sectors have reported closure and/or suspension of businesses. The distributions based on scales indicate that non-operative companies are mostly micro and small-scale companies. Especially in Gaziantep, this is even more evident because all of the medium and large-sized companies have reported that they are continuing their businesses. In Hatay, more than 70 percent of large-scale companies are currently active (Figure 11).

**Figure 11. Operational status of the enterprises by sector and size (%)\***



Source: TEPAV

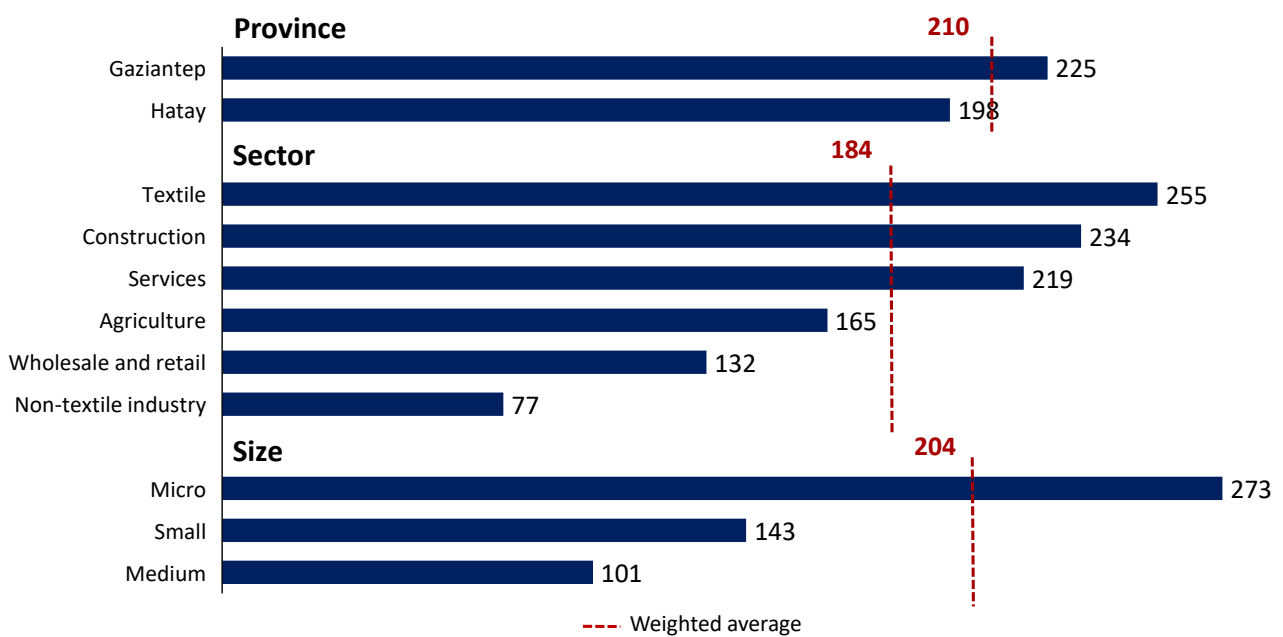
\* There are no businesses in Adana that have reported to have suspended their operations. Categories with less than two samples are not included in the analysis. Osmaniye and information - communications sector are not covered because of insufficient sample size.

The expected time for recovery in the textile, construction and service sectors is longer than 7 months, and pessimism increases as the scale of the firm gets smaller. Non-operational companies in Gaziantep and

Hatay were asked about the time period they foresee for starting their activities. While the companies in Gaziantep indicate a period of 7.5 months, it is predicted to be 6.5 months in Hatay. The breakdown of the responses according to the sectors and company scales indicates a period of 7-8.5 months in the textile, construction and service sectors, 4-5 months in agriculture and trade, and 2.5 months in non-textile manufacturing for recovery. As firm scale gets smaller, recovery prospects worsen. While the recovery expectation is 9 months in micro scales, it regresses to 3.5 months in medium scales. The fact that the companies surveyed have a higher share in the service and textile sectors in Gaziantep and in the wholesale and retail sector in Hatay is thought to be a determinant in the differentiation of recovery prospects given that the scale distributions of the participating firms in both provinces are very similar (Figure 132).

**It is important to note that the negative outlook observed in the textile sector has been predominant since 2022, so the current stance is not only attributable to the earthquake damages.** In the domestic market, consumers' demand focused more on compulsory items such as food and housing due to the rapid increase in inflation during 2022; furthermore, due to the increasing raw material and labor costs, competitiveness has decreased and there has been a loss in foreign markets. In official employment figures of the sector, there has been a continued decline in the last couple of quarters (Figure 12).

**Figure 12. Average number of days required to be operational (days)\***

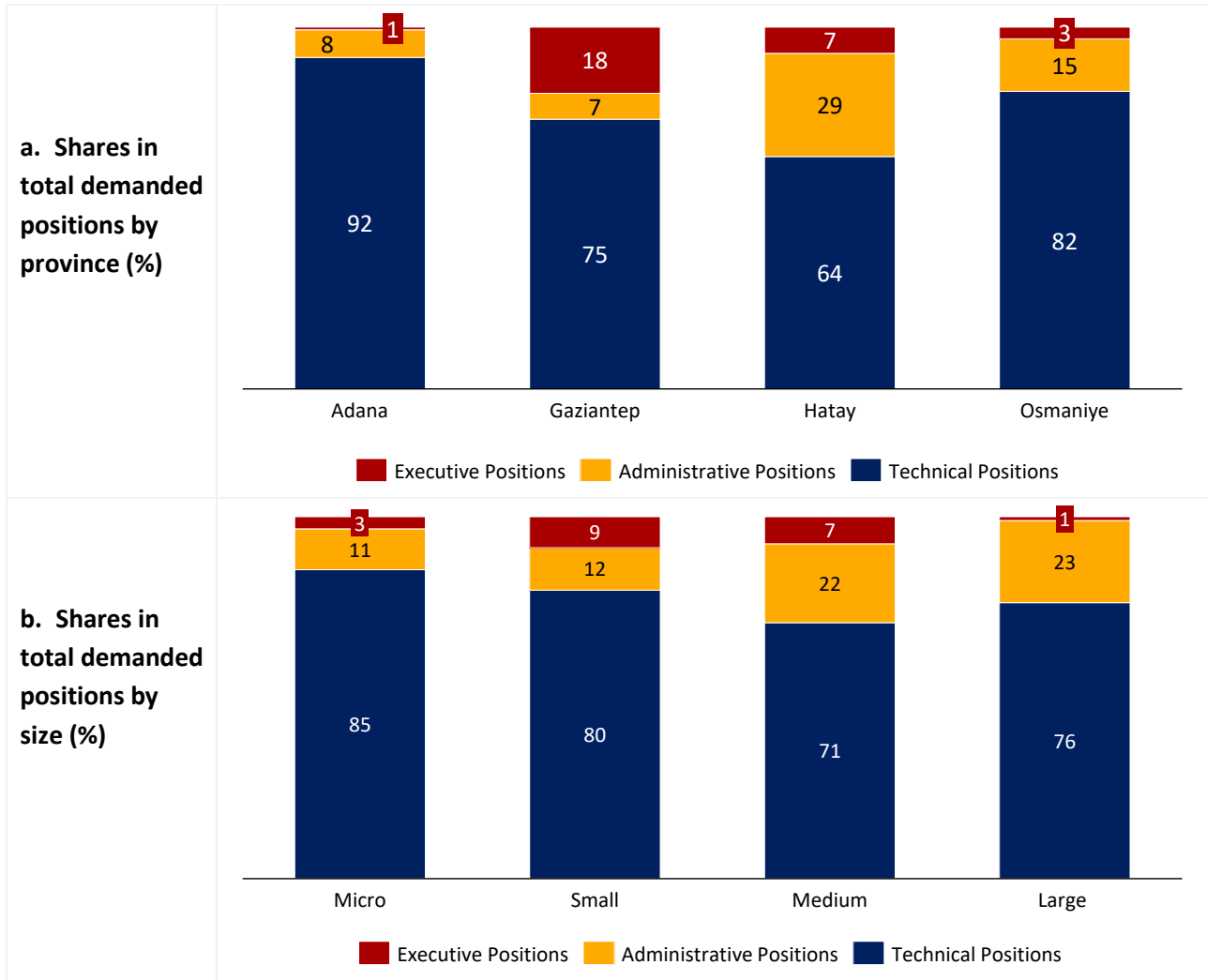


Source: TEPAV

\*Categories less than two samples are not included. The calculations are based on the weighted averages of the respective number of firms.

**More than 70 percent of the vacant/required positions are technical.** The company representatives participating in the survey were asked to classify their workforce needs by functions as technical, administrative and executive/managerial positions. The distribution of the related responses show that the most demanded positions in all provinces and at all scales are technical staff. This preference is most evident in Adana and Osmaniye, with 92 percent and 82 percent respectively. The shares drop to 75 percent in Gaziantep in favor of executive/managerial positions and to 64 percent in Hatay in favor of administrative staff. According to the size of the enterprises, the requirement of the technical staff seems to decline generally as the company size gets larger (Figure 13).

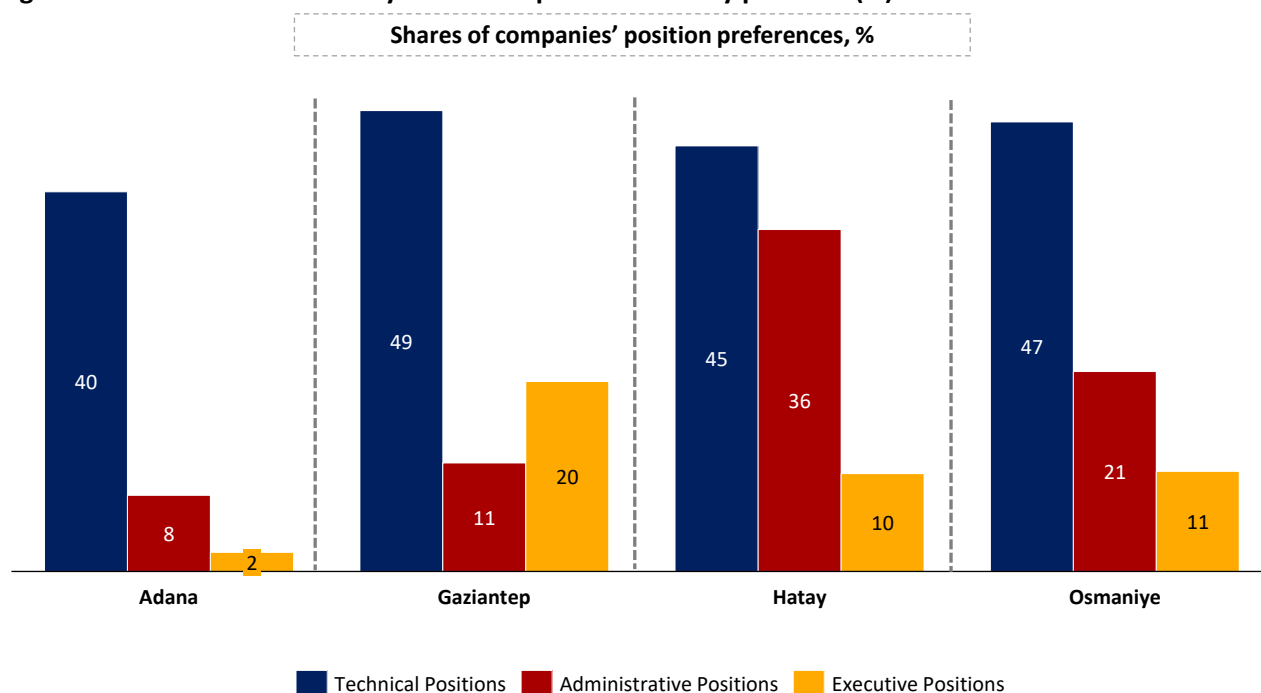
**Figure 13. Number of functional positions demanded by province and size (%)**



Source: TEPAV

**Almost half of the interviewed companies reported demand for technical staff.** When the responses related to the breakdown of the workforce needs by position are classified in binary terms, the results indicate that more than 40 percent of the companies require technical staff to continue their businesses. In Hatay, the need for administrative staff is also noticeable with a share of 36 percent, and in Gaziantep there is a requirement for executive/managerial positions by 20 percent (Figure 14).

**Figure 14. Workforce demand by functional positions and by province (%)\***



Source: TEPAV

\* Firms can report more than one category, the shares do not sum up to hundred percent.

**Provincial distributions show that the highest demand for labor is in Hatay.** Sectoral distribution of the workforce needs by functions indicates that 90 percent of the enterprises in Hatay reported demand for labor in construction sector, the shares decline to around 60 percent in wholesale-retail trade and manufacturing sectors, and further to 45-50 percent in agriculture, transport and services. 2/3 of the enterprises in agriculture and services sectors in Gaziantep, and 3/4 of the enterprises in non-textile sector in Adana demand labor for the continuation of their businesses. The tail cases are in transport and storage sector where all enterprises in Adana reported a demand for labor, but no demand was declared in Gaziantep. A similar case is valid for the services sector in Adana (Table 13).

**Table 13. Workforce demand by positions by sector (%)\***

**Total positions**

	Hatay	Gaziantep	Adana
Construction	90.0	14.3	42.9
Industry (except textile)	65.0	54.2	76.9
Textile	63.6	57.1	50.0
Wholesale and Retail	59.3	44.4	18.2
Agriculture, Forestry, Fisheries	50.0	66.7	42.1
Transport and Storage	50.0	0.0	100.0
Services	45.5	66.7	0.0
<b>Total</b>	<b>60.3</b>	<b>51.4</b>	<b>41.3</b>

**Technical positions**

	Hatay	Gaziantep	Adana
Construction	75.0	14.3	42.9
Industry (except textile)	60.0	50.0	76.9
Wholesale and Retail	44.4	44.4	9.1
Agriculture, Forestry, Fisheries	37.5	55.6	42.1
Services	36.4	66.7	0.0
Transport and Storage	25.0	0.0	100.0
Textile	18.2	57.1	50.0
<b>Total</b>	<b>44.9</b>	<b>48.6</b>	<b>39.7</b>

Source: TEPAV

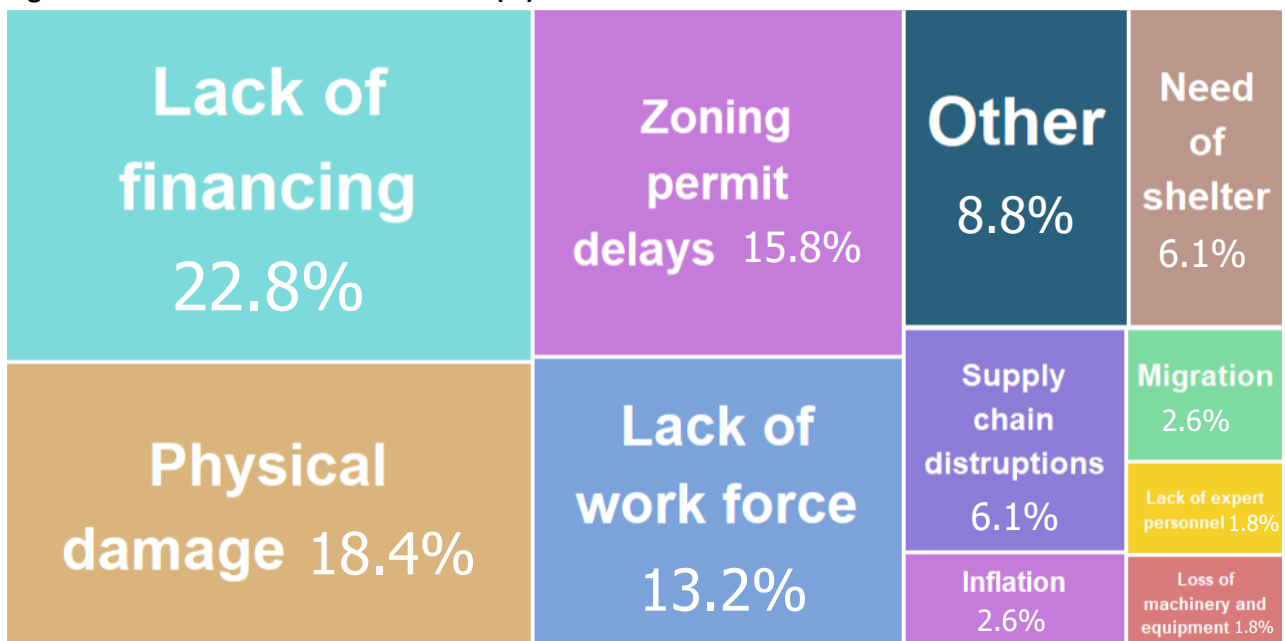
\* Osmaniye is not included due to insufficient sample size.

**In Adana and Gaziantep, most of the sectoral demand for labor entirely consists of technical staff.** Comparisons of the sectoral responses for the demand of personnel according to the positions reveal that in Adana, all sectors except for wholesale and retail trade, demanded positions are for technical staff. The same is valid for Gaziantep except for non-textile manufacturing and agriculture sectors (Table 12).

**Lack of finance and loss of workforce are the leading constraints limiting business activities.** In the survey, the responses of the participants regarding the constraints for their activities are as follows:

- The heavy damage of the earthquake to their workplaces and stores, the loss of their machinery-equipment, products and stocks (18.4 percent and 1.8 percent, respectively).
- A significant loss of employment due to the death and displacement of workforce (17.6 percent). Especially in the agriculture sector, it is the most essential problem requiring urgent action.
- Many participants stated that the delays in the zoning plans prevented the solution of infrastructure and superstructure problems. For this reason, the problem of accommodation, which is the primary condition for the revival of life in the city, cannot be solved (15.8 percent).
- It is stated that infrastructure and logistics problems continue disrupting the supply chain (6.1 percent).
- The payment system is blocked in the region with a significant amount of checks that have expired and have not been paid. While some public banks removed the interest burden of the pre-earthquake loans or postponed the repayments, private banks did not provide this support and even tightened the conditions for new loans, increased the interest costs and demanded additional guarantees. Businesses state that even if their bank debts and checks are postponed, they have to pay their personnel salaries and insurance, indicating that their expenditures continue, and that the support provided is very short-term and limited (22.8 percent) (Figure 15, Annex 3).

**Figure 15. Barriers to business activities (%)\***



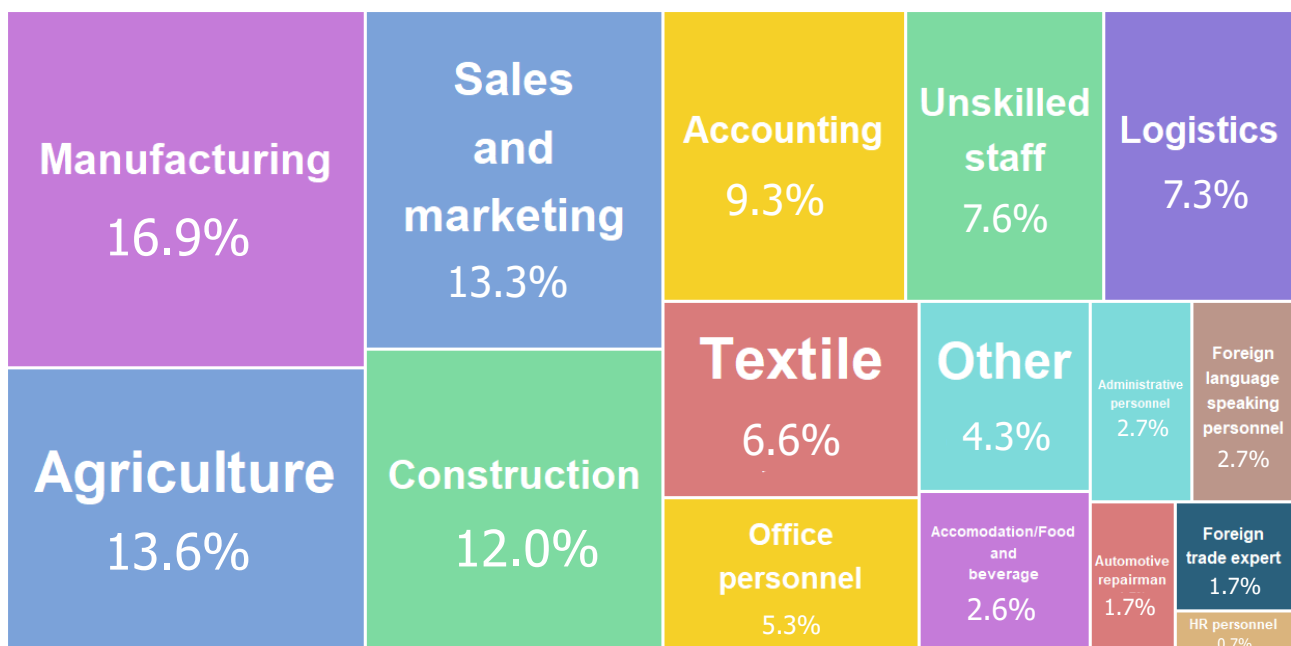
Source: TEPAV

\* The analysis is based on the responses of the non-operating enterprises.

**Almost half of the job requirements are technical staff in manufacturing, in agriculture and sales-marketing sectors and/or departments. Although there is a wide range of sub-categories for occupations demanded especially for manufacturing and construction staff, work experience emerged as commonly preferred qualification.** In the survey, the shares of the participants' responses regarding their demands for the workforce by their occupations are as follows:

- Technical staff needed in non-textile manufacturing and textile manufacturing is largely preferred by the medium and large companies in Adana. There is a wide range of sub-categories but machine operator is the most frequently stated occupation. While the preference for educated, such as being a vocational high school graduate was reported, specific specializations such as food, mechanical and chemical engineers were also requested.
- In agriculture, medium and large enterprises also have labor demands in Adana, Hatay and Osmaniye. Although unskilled agricultural worker is the most demanded position, the requirements for product knowledge such as cotton or olive have been reported. Packaging is also an area where there is a shortage of personnel. Personnel who can use ginning machines is a key request in Hatay. In addition, specific occupations such as agricultural technician, landscape architect, food engineer were also requested.
- Sales - marketing and accounting are the departments with the second highest need for labor and the demand is from medium and large-sized companies, however there is a further demand for sales - marketing personnel and accountants, especially in Hatay, in small and micro enterprises. As an employee profile, work experience and communication skills (for the marketing staff) are prominent qualifications.
- Technical staff for the construction sector is the most demanded position, and the need has been reported mostly by micro and small-scale companies. Preference has been reported in all sub-categories such as moulder, blacksmith, masonry and marble master, electrician as well as trained specialist staff such as architects, engineers, site supervisors and inspectors.

**Figure 16. Workforce demand by occupations (%)**

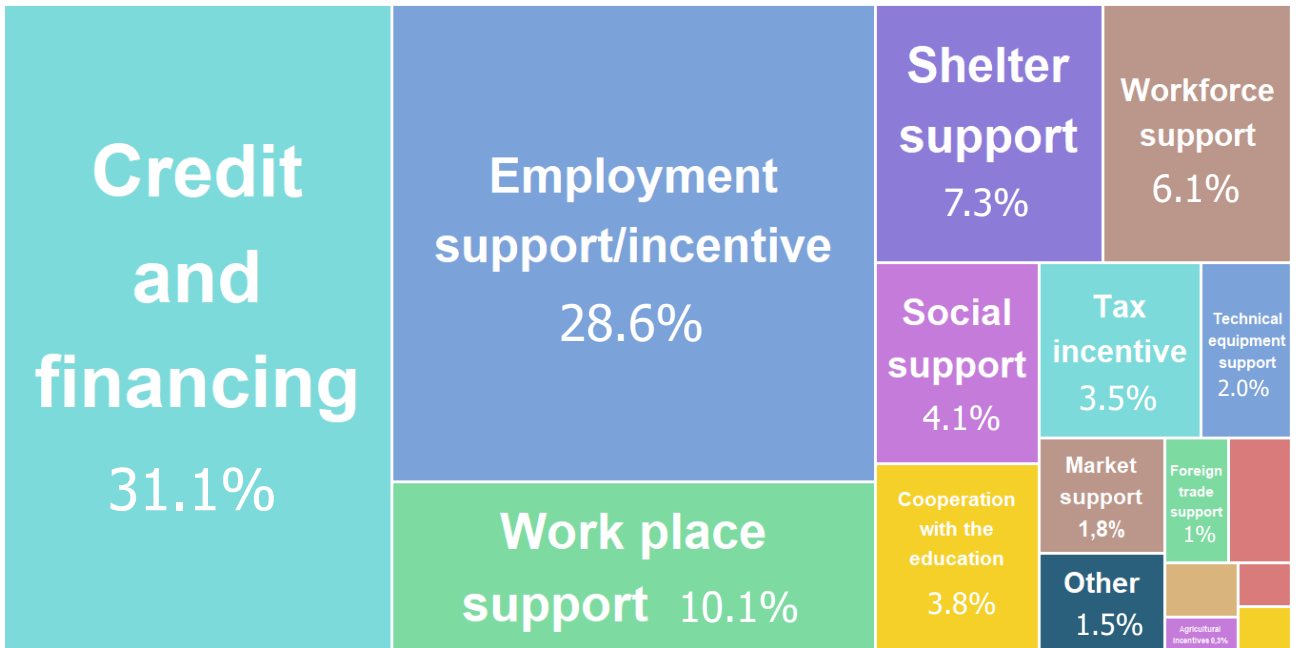


Source: TEPAV

- Most of the personnel required in transportation and storage jobs are for small and micro enterprises and almost all of them stated drivers as occupations desired. There are also companies that report the need for warehouse personnel.
- The service sector generally includes the accommodation and restaurant sector. Therefore, professions such as waiter, cashier or certified staff such as cooks are indicated. Strong communication is a frequently mentioned competency. Personnel who can speak a foreign language and can use computers were among the preferences in almost every group (Figure 17, Annex 4).



**Figure 17. Proposed support areas (%)**



Source: TEPAV

**Interviewed businesses stated a number of urgent support measures varying according to the extent of their damage and their field of activity.** Removal of the debris, rapid maintenance and repair works, provision of container workplaces and warehouses, compensation of the loss of workforce due to displacement, death or psychological trauma are among the most fundamental and urgent needs in Hatay where the damage is heaviest. Infrastructure and housing problems for the employees and their families should be solved immediately. It is considered critical to provide new workplaces and offices and establish container cities close to industrial zones. Urban plans should include social facilities such as schools and bazaars and consider cultural settlement patterns.

**Financing requirements should be met urgently and accessing to Credit Guarantee Fund (Kredi Garanti Fonu – KGF) is strongly demanded by the participants.** Respondents from all provinces and from all different scaled companies indicate their financing requirements as, immediate provision of interest-free or low-fixed interest loans, long-term and high-limit funding. Regarding KGF loans, they require that the disaster zone companies be prioritized and/or terms and conditions be eased.

**Measures that will support the employer and keep the employee in the region are considered critical.** In this context, the most important and frequently mentioned measures are social insurance payment and salary support for the employees. Increasing the limits of Short Working Allowances (Kısa Çalışma Ödeneği – KÇÖ) is also one of the recommendations.

**Exemptions and exceptions for taxes, the cancellation of debts constitute the main public support areas.** Almost all of the interviewed businesses have tax-related requests such as deletion or postponement of the region's SGK debts, extension of customs duty exemption, Motor Vehicle Tax exemption in new vehicle purchases and tax support in new construction machinery purchases etc. The coverage of the "State Investment Zones" can be extended (Adana and Hatay can be located in the 6th Region) and measures related tax exemptions and exceptions, insurance premium supports or investment allocation priorities can be scheduled within this framework (Figure 17, Annex 5).

## D. Interviews with Municipalities

Within the framework of the field study, TEPAV team met/communicated with the officials of Adana, Gaziantep and Hatay Metropolitan Municipalities and their subsidiaries. In the meetings/interviews, in addition to the data on workforce and job losses, information on the earthquake damages and destructions on infrastructure and superstructure components such as natural gas distribution system, water provision and processes, internet and telecommunication networks and transportation etc. were compiled. Officials' opinions on the issues requiring urgent actions and supports were noted. The participated departments of the respective municipality and subsidiaries are summarized in Table 14.

**Table 14. Interviews with municipalities and affiliated institutions in Adana, Gaziantep and Hatay**

	Municipality	Subsidiaries
Adana	Metropolitan Municipality Research and Projects Department (face-to-face)	Beldetaş (via email) Ulaşım A.Ş. (via email) İmar A.Ş. (via email)
Gaziantep	Metropolitan Municipality Human Resources and Institutional Development Department (via email)	Gaziağaç (via email) GASKİ Enerji (via email) Gaziulaş (via email) Gazikültür (via email)
Hatay	Metropolitan Municipality Traffic Services Branch (face-to-face and via email)	HATSU (face-to-face) TEDAŞ (via email)

Source: TEPAV

Responses of the municipalities and their subsidiaries are summarized below on a provincial basis:

### D.1. Hatay

**Hatay Metropolitan Municipality reported considerable damage and large loss of workforce.** In addition to the destruction in the buildings and loss in machinery and equipment park, more than 20 of signalized intersections were heavily damaged. Inter-provincial transportation is also disrupted due to the damages in the bus terminals in Antakya, Erşin, Dört Yol and İskenderun. It was highlighted that especially İskenderun and Antakya terminals should be restored urgently as they are severely hit.

**The number of employees was 4333 and dropped to 2911 with a loss of 33 percent where the decline in female workers was much higher (79 percent).** The authorities stated that especially female employees are not requested to return to work because of the significant housing problem in the province. Basic needs such as housing, education and medical care should be provided and the employees should return to work as soon as possible. In addition, around 9 percent of the current workforce are EYT beneficiaries which may lead to further pressure on labor shortage in near future. They reported around 100 technical positions and 500 administrative positions occupied by the workers who are on the long-term/medical/administrative leave, and therefore, there is a need for 166 technical and 546 administrative positions to continue their operations (Table 15).

**Table 15. Question 2 - Workforce composition: Hatay**

	Metropolitan Municipality		HATSU		TEDAŞ	
	Female	Male	Female	Male	Female	Male
Total number of workers before the earthquake	760	3573	179	2006	29	874
Number of workers employed and currently at work (not on leave)	163	2748	26	1725	29	854
Number of workers lost/died	23	63	6	30	-	14
Number of workers who left/ moved elsewhere	-	-	0	3	-	4
Number of workers who benefited from the EYT regulation and retired	-	10	0	14	-	11
Number of workers expected to leave the job benefiting from the EYT regulation	-	250	0	0	-	-
Number of workers on long-term/medical/administrative leave	5	25	147	251	3	4
Number of workers currently at work (not on leave) over the age of 50	-	-	2	271	-	7
Number of workers with disabilities currently at work (not on leave)	-	-	-	-	7	19

Source: TEPAV

**The Water and Sewage Administration (Hatay Su ve Kanalizasyon İdaresi - HATSU) reported that the sewage lines were severely damaged.** Currently, sewage services are limited to designated areas such as tent and container cities. Insufficient length of the sewer pipes limits the coverage of the service to the entire residential units. Machines for construction are under rubble, supply of repair materials is difficult and there is employment shortage. Therefore, the wastes cannot be delivered to the treatment plants. In addition, the existing 5 treatment plants in Hatay are heavily damaged and most of them are out of use.

**Due to heavy destruction of waterlaying pipes and the loss of well water, there is a shortage of drinking water. Hatay's sewage and drinking water renewal plan is being delayed.** Problems continue to a large extent in places where drinking water is submerged due to rubble removal works, especially in Antakya, Defne and Kırıkhan districts. In addition, the displacement of citizens to relatively less damaged districts such as Reyhanlı, Yayladağı, Altınözü, Erzin and Dört Yol increased the population of these districts, and thus, HATSU has difficulties in supplying water to these destinations. Renovation works for the planning of sewage and drinking water services cannot be carried out because Hatay urban settlement evaluation is ongoing. No robotic ground inspection was performed due to the continued aftershocks.

**In HATSU, there was a loss of 20 percent of the workforce and female employment contracted by 85 percent.** In addition, 23 percent of their employees are declared as on long-term/medical/administrative leave and another 16 percent are the ones who are over the age of 50. Turkish Electricity Distribution Co. (Türkiye Elektrik Dağıtım A.Ş. – TEDAŞ) office in Hatay reported a loss of 20 employees (2 percent) and all are male. There are 7 technical positions occupied by the workers who are on the long-term/medical/administrative leave, and another 7 are the ones who are over 50 years old. TEDAŞ had a recording of 26 workers (7 female, 19 male) with disabilities currently at work, 1 managerial and 50 technical positions were also noticed as vacant. EYT beneficiaries in both subsidiaries are considerably limited compared to the Metropolitan Municipality (Table 15).

**First three required immediate actions: Hatay**

- New offices should be provided for the maintenance of public services.
- Fundamental needs such as housing, education and medical care should be provided for the employees so that they could return to their work.
- İskenderun and Antakya bus terminals should be restored urgently.

**HATSU and similar affiliated institutions need urgent financial support and new urban plan needs to be finalized.** The water service has been provided free of charge after the earthquake and HATSU became unable to generate income. In addition, expenses such as refueling equipment and machinery continue leading to significant payment gaps and financial difficulties. In this context, there is a substantial and urgent need for financial support to public service providers such as HATSU. In order to encourage employees to stay in the region, it is thought that earthquake zones can be dedicated as special statuses and higher salaries can be provided. Moreover, Hatay's new urban plan needs to be completed immediately so that the entire infrastructure, including sewage and drinking water pipelines, can be built from scratch within a comprehensive master plan.

**D.2. Adana**

**After the earthquake, there were emigrants from Adana as well as new settlers from other earthquake provinces. The increasing population of the city will lead to substantial infrastructure problems in the very near future.** After the earthquake, approximately 350,000 people migrated to Adana. As some of the earth science experts announced that there might be an earthquake in Adana in not a distant time, it is thought that approximately 200,000 people left Adana. Therefore, there are currently around 150,000 immigrants in Adana. However, it is considered that people who emigrated will return to Adana, so it is thought that a serious burden will arise on Adana's infrastructure with the return of these people to the province. Adana needs a comprehensive infrastructure investment.

**Workforce loss in Adana Metropolitan Municipality and its subsidiaries is limited, but the number of current and forthcoming beneficiaries of EYT consist a potential risk to the future employment.** The subsidiaries Beldetaş and İmar A.Ş. did not report any loss of employment where Ulaşım A.Ş. stated a decline of 237 in the number of personnel (3.5 percent), 1 of whom died. The future and forthcoming EYT beneficiaries consist of 14 percent and 11 percent of the current workforce, respectively in Ulaşım A.Ş. and İmar A.Ş., which sources a significant risk of a substantial employment gap in the near future. The number of employees over the age of 50 are high consisting of 12 percent in Beldetaş and İmar A.Ş., and 17 percent in Ulaşım A.Ş. (Adana Metropolitan Municipality has not reported the details of the past and current workforce, but the recorded number of personnel at the age of 50 and above are 1488). The share of disabled workers is 4.2 percent in Ulaşım A.Ş. and most of them are male (Table 16).

**Table 16. Question 2 - Workforce composition: Adana**

	Metropolitan Municipality		Beldetaş		Ulaşım A.Ş.		İmar A.Ş.	
	Female	Male	Female	Male	Female	Male	Female	Male
Total number of workers before the earthquake	-	-	19	22	1216	5445	44	158
Number of workers employed and currently at work (not on leave)	-	-	-	-	1213	5211	-	-
Number of workers lost/died	0	0	-	-	-	1	-	-
Number of workers who left/moved elsewhere	0	0	-	-	-	-	-	-
Number of workers who benefited from the EYT regulation and retired	4	86	-	-	8	267	1	11
Number of workers expected to leave the job benefiting from the EYT regulation	7	161	-	-	40	554	2	8
Number of workers on long-term/medical/administrative leave	0	0	-	-	-	-	-	-
Number of workers currently at work (not on leave) over the age of 50	243	1245	4	1	223	973	5	20
Number of workers with disabilities currently at work (not on leave)	-	-	-	1	30	240	-	6

Source: TEPAV

**10,000-12,000 buildings are expected to be demolished in Adana and the construction of new houses will require a substantial budget and financing.** Inspection of approximately 50 percent of the existing building stock in the province has been completed. At this stage, the number of buildings to be demolished is around 6,000. It is estimated that 10,000 - 12,000 buildings should be demolished at the end of the investigation process. When calculated, it is considered necessary to construct approximately 70,000 to 100,000 residences (apartments). The budget of the related housing project will be of serious size and create a substantial need for funding along with labor demand with the necessary skills.

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**First three required immediate actions: Adana**

- Infrastructure should be strengthened to meet the growing population of the city.
- Building inspection and damage assessment should be completed urgently to plan the reconstruction process.
- Financing for reconstruction and improvement of the infrastructure is required.

**Adana Metropolitan Municipality proposes the establishment of a "Crisis Management Center".** The city is located in an earthquake zone and the earthquake is an important risk that has to be managed. Similarly, there are other problem areas such as the climate and water crisis which are not less important than the earthquake, and require important steps to be taken starting from today. Therefore, it is considered essential to develop risk management strategies, enable task distribution and prepare work plans by establishing a central organization that will manage the activities with the coordination of the relevant institutions and organizations.

**D.3. Gaziantep**

**In Gaziantep, infrastructure or superstructure-related damages and therefore urgent support requirements are concentrated in Nurdağı and İslahiye districts where demolition is intense, whereas no losses were reported in the center.** Gaziantep Metropolitan Municipality reported that there was no

problem in the building stock or infrastructure caused by the earthquake in the center. There is no loss of employees in the Municipality due to death or leaving the city. In this context, no labor requirement or construction activity was reported due to the earthquake. It has been stated that all district municipalities of the metropolitan municipality are in contact, and the city has no infrastructure problems except in Nurdağı and İslahiye (Table 17).

**Table 17. Question 2 - Workforce composition: Gaziantep**

	Metropolitan Municipality		Gaziğaça		Gaziulaş		Gaski Enerji		Gazikültür	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Total number of workers before the earthquake	475	1125	296	2423	25	1284	2	174	397	273
Number of workers employed and currently at work (not on leave)	-	-	295	2414	23	1207	2	174	258	229
Number of workers lost/died	0	0	1	3	0	0	-	-	2	
Number of workers who left/moved elsewhere	0	0	1		0	0	-	-	0	0
Number of workers who benefited from the EYT regulation and retired	11	29	-	15	0	98	-	-	0	1
Number of workers expected to leave the job benefiting from the EYT regulation	0	0	15	85	0	100	-	-	0	0
Number of workers on long-term/medical/administrative leave	0	0	-		2	3	-	-	1	1
Number of workers currently at work (not on leave) over the age of 50	23	79	44	562	3	109	-	-	32	9
Number of workers with disabilities currently at work (not on leave)	-	-	62	8	0	7	-	-	21	8

Source: TEPAV

**Female employment in Gazikültür contracted by 35 percent, in Gaziulaş EYT beneficiaries pose a risk factor for the employment.** 4 subsidiaries responded to the survey in Gaziantep: Gaziğaça, Gaziulaş, Gazikültür and Gaski Enerji. While there was no loss of workforce in Gaski Enerji, total losses reported in Gaziğaça, Gaziulaş and Gazikültür are 0.4, 6.0 and 27.3 percent, respectively. When the shares of current and forthcoming beneficiaries of the EYT in the present labor force are taken into account, it is seen that it constitutes an important risk factor, especially in Gaziulaş with a share of 16.1 percent. These shares are 2.5 percent in the Metropolitan Municipality and 4.2 percent in Gaziğaça, and at negligible levels in other subsidiaries. Concerning the number of personnel at the age of 50 and over, it is the highest in Gaziğaça consisting a share of 22.4 percent of the total workforce. Similarly, the share of disabled workers currently at work is the highest in Gaziğaça with a 2.5 percent (Table 16).

**First two required immediate actions: Gaziantep**

- Debris removal operations in İslahiye and Nurdağı should be completed to solve infrastructure problems immediately.
- Accommodation needs of the workers and local people in the damaged districts should be met with a medium-term perspective.

## **E. Interviews with Development Agencies**

Within the scope of the project, development agencies operating in the region were contacted and information about their work in the earthquake region obtained. The focus of the meetings was the need for labor force in the region, and their views were also sought on the effects of the earthquake on women's employment and incentives for their return to work, the participation of migrant groups and Syrians in the labor market, and the employment of the disabled. The highlights of the meetings held in this framework can be found below.

### **E.1. Eastern Mediterranean Development Agency (Doğu Akdeniz Kalkınma Ajansı-DOĞAKA) - Hatay**

Due to the intensive population growth in Hatay, the identification of labor force needs has not yet been completed, but various programs are in place to stimulate the employment. With the Entrepreneur Development Center Program developed by DOĞAKA, it is aimed to establish an innovative platform where entrepreneur candidates can come together with investors who can provide funding and resources after the training, consultancy and mentoring services they will receive. It is stated that this initiative has the potential to increase employment. It was stated that the financial resources allocated for the purchase of machinery and software for the Entrepreneur Development Center Program were transferred to the Regional Development Oriented Recovery Emergency Action Plan (BOTAP) after the earthquake.

The existing problems in the cobbling, leather trade, furniture business, tourism and food sectors have deepened with the loss of infrastructure and superstructure. With the 2024-2028 Regional Planning, which is expected to be revised, there is a need to work in areas such as upgrading the tourism and food sectors, prioritizing rural and social development and empowering women. The importance of sectoral diversification was emphasized, especially for olive oil to be able to open up to international markets.

As one of the provinces with the highest number of destruction, Hatay needs urgent solutions for the construction sector. In this context, it was stated that the zoning problem should be solved quickly and efforts for the expropriation of land should be prioritized. For example, the relocation of the Leatherworkers Industrial Site, which was completely destroyed after the earthquake, moving to a new location is a priority.

Women's cooperatives are looking for funds to continue their activities after the earthquake. It was also noted that training programs for women contribute positively to women's employment and that these programs should be encouraged.

### **E.2. Çukurova Development Agency - Adana**

Damage assessments were conducted in Organized Industrial Zones (Organize Sanayi Bölgeleri-OSB) and Small Industrial Sites (Küçük Sanayi Siteleri-KSS) in Adana and no major damage was reported. Regarding industrial zones, it was determined that there were no major damages in OSBs, while a few industrial enterprises were damaged in KSSs. It was stated that these studies were limited to damage assessment and that no research on labor loss was conducted, and that there were very few deaths among industrial workers due to the earthquake, so labor loss was limited. It has been stated that studies should be conducted on labor loss and its requirements, and studies should be designed on the changing labor demand especially for sectors where change is experienced.

The results of the survey applied to enterprises in Adana indicate that there was no loss of labor force, but enterprises were affected economically. It was stated that a questionnaire was applied to enterprises in Adana and the answers received from the questions such as, "Did any of your employees pass away?" and "Did any of your employees change their province of residence after the earthquake?" confirmed that there was no loss of labor force. On the other hand, although it was stated that there was no physical damage

and/or minor damage in industrial enterprises, it was reported that there were problems in the supply chain, raw material supply, purchase and sale. It was also reported that access to loans has become difficult and that financing support is needed for existing and/or new enterprises.

Since Adana is one of the provinces in the region associated with wholesale trade, the biggest problem encountered is the inability to reach the addressee and/or the lack of an addressee. Another finding from the questionnaire study is that the checks of the enterprises in the trade chain bounced, or that the addressees could not be reached due to death or bankruptcy of the enterprises.

The fact that the shoemaking and furniture sectors, which are among the leading sectors in Hatay, are unable to carry out their activities may create business opportunities for existing companies in Adana. Likewise, it was noted that Syrians play a major role in the shoemaking sector, which is also prominent in Gaziantep, and that the development of the shoemaking sector in Adana, which is a labor-intensive sector, could create employment opportunities for both Syrian labor and citizens.

Within the scope of BOTAP, a "bazaar project" is being implemented in Adana to compensate for the damage to business establishments. It is aimed to create a bazaar consisting of single-storey prefabricated or steel construction structures so that businesses which were damaged in the earthquake zone can continue their activities.

The earthquake also had a limited impact on agriculture, one of the leading sectors in Adana. It was stated that 80 percent of agricultural workers in the province are Syrians, and according to data from the Ministry of Agriculture, the loss of labor force in the agricultural sector is very low, as in the industrial sector.

Studies conducted by Metropolitan Municipalities based on infrastructure and water use show that Adana receives migration from surrounding provinces. Adana is one of the least affected provinces compared to the 11 provinces where the earthquake occurred. Adana received migration mainly from Hatay and Kahramanmaraş provinces, and it is stated that the majority of the 150,000 - 200,000 people who migrated to Adana are local citizens. It was stated that there is no data on the migration movement of Syrians. It was emphasized that due to the internal migration to Adana, the existing businesses are not sufficient for the citizens and that new employment opportunities need to be created for the migrants.

Within the scope of the SEECO project, efforts are being made to promote women's employment through the social procurement program. In line with the project objective, it is stated that project proposals will be supported in order to support women entrepreneurs and enable women to establish their own businesses. It was noted that if even one person working within the scope of the social project is Syrian, the relevant project idea is accepted as a social enterprise and efforts are made to encourage Syrian women to employment. Within the scope of the relevant project, it was stated that grant support will be provided together with mentoring training.

A "Children's Science Academy" is planned to be established in Adana to help migrant children develop science and the arts. It has been stated that there has been an increase in the participation of women and children who migrated after the earthquake in the Science Academy at Mersin University and that a similar academy will be established in Adana in order to ensure the psycho-social development of children and to encourage their orientation towards science and art.

Projects to be developed in order to support citizens who lost body parts in the earthquake to be able to hold on to life and participate in the labor force have gained importance. It was stated that many patients from the earthquake provinces were brought to Adana for treatment. The need for vocational trainings and psycho-social support for the participation of disabled people in the labor force was emphasized.



### E.3. İpekyolu Development Agency - Gaziantep

It was reported that Gaziantep's exports contracted by 8% after the earthquake. The supply chain in the textile, footwear, food and plastics sectors, which are among the dominant sectors in the region, was disrupted after the earthquake and cash flow stopped in parallel. As a result of the damage assessment study conducted by İpekyolu Development Agency in the region, it was stated that there was not much damage to the enterprises in the center of Gaziantep and no loss of labor force was observed, but Nurdağı and İslahiye districts were significantly affected by the earthquake.

The Ministry of Industry and Technology plans to invest 158 million Turkish Liras in Nurdağı and İslahiye within the scope of BOTAP, which was implemented to accelerate recovery and revitalize the economy after the earthquake. Within this framework, 358 steel construction sites will be established and delivered to tradesmen for 2 years rent-free. The enterprises to be established are planned as shoemaking workshops in Nurdağı and textile and sports ball production workshops in İslahiye. It was stated that women are expected to be employed especially in the fields of shoe uppers, sole assembly and shoe outers. It was also stated that women's employment will be prioritized in the textile and sports balls production workshop to be established in İslahiye. In addition, the İpekyolu Development Agency has played an important role in ensuring the continuation of commercial life by matching cooperatives damaged in the earthquake zone with businesses outside the earthquake zone. Similar initiatives need to be scaled up.

İpekyolu Social Entrepreneurship Center was established in İslahiye within the scope of the SEECO project, which aims to ensure socio-economic empowerment and social cohesion of women with a focus on social entrepreneurship. Through the center, which will operate as a source of livelihood center, it is planned to create employment in the district and to provide purchase guarantees for the products produced through the social purchasing model. Additionally, the need to support social enterprises was underlined in order to maximize the social benefit of the social entrepreneurship center and ensure its economic sustainability. In this context, after the earthquake, it became important to disaster-proof the institutional structures of women's cooperatives.

The Presidency of Defense Industries (Savunma Sanayi Başkanlığı-SSB) plans to establish a carbon fiber production facility in the İslahiye-Nurdağı region, which was most affected by the earthquake. In the Kilis Polateli-Gaziantep Şahinbey region, the Textile Specialized Organized Industrial Zone (OSB) project is expected to complete its infrastructure. With the completion of this project, nearly 100,000 people are expected to be employed. Socio-economic development-oriented projects to be implemented through the Regional Reconstruction Center established by the Gaziantep Chamber of Commerce (GTO) are expected to stimulate commercial life in the region. İpekyolu Development Agency officials also noted that addressing problems with housing and water supply networks for workers in the earthquake zone is of primary importance in increasing labor force participation.

Of the 15 daycare centers in the center of Adıyaman, 4 of them are currently operational and daycare centers are critical for women's participation in the labor force. It was mentioned that some employees in earthquake-affected areas were forced to bring their children to their workplaces, and that daycare services should be provided to enable women to return to work or participate in business activities.

## F. Conclusions and Policy Recommendations

**It is essential that damage assessment be made promptly, an effective damage management strategy determined and the support areas be prioritized and implemented immediately.** The severe earthquakes that occurred in Turkey in February were effective in a wide geography and 11 provinces were declared disaster zones. The most heavily damaged provinces were Adıyaman, Hatay, Kahramanmaraş and Malatya, while Gaziantep's Nurdağı and İslahiye districts were located in the first degree damaged area. The provinces of the region contribute significantly to the Turkish economy, especially in production, exports and employment.

**In addition to the heavy physical damage, businesses also experienced significant loss of workforce in the earthquake.** Especially in the regions where the destruction was heavy, the majority of the workers did not return to their jobs due to death, displacement or psychological trauma. Therefore, it is of great importance to compensate for these losses. In this framework, TEPAV pursued a rapid workforce assessment study in the disaster zone provinces with the main objective of exploring potential entry points for developing a human capital support initiative to help businesses and municipalities in the region resuming and/or maintaining their operations.

**The support requirements of the enterprises differ according to the damage of the region.** Field studies and telephone surveys carried out with the participation of businesses in Adana, Osmaniye, Gaziantep and Hatay between 21-24 April 2023 confirmed that the greatest damage and destruction occurred throughout Hatay and in Gaziantep's Nurdağı and İslahiye districts, thus experienced the deepest workforce losses. Debris removal works are still ongoing in these regions, infrastructure problems continue, sheltering is the first priority problem hindering the return of the people who have migrated to other provinces, and also to the ones who stayed in the region. On the other hand, in districts and provinces not heavily affected by the earthquake, such as Adana, there is a significant inward migration disrupting the services and requiring large infrastructure, reconstruction and housing investments.

**The impact of the earthquake in different provinces reveal the necessity of a multidimensional approach by considering the direct and indirect effects in the design of the support packages.** In this context, the policy recommendations in the light of the findings of the field survey are summarized as follows:

- In the regions where the earthquake damage is severe, infrastructure and superstructure problems are major. Shelter problems need to be solved urgently and with a medium-long-term perspective. Therefore, funding for these investments should be prioritized.
- Zoning plans should respond to the highest need in terms of construction and design. Social facilities in line with the cultural patterns of the cities should be incorporated. In the funding of the settlement projects, this could be determined as a selection criterion.

Significant workforce loss in the region led to many different job vacancies in various sectors. Related recommendations can be detailed as follows:

### ***Sectoral Supports***

- Shoemaking and textile sectors are prominent in Gaziantep and leatherworking in Hatay. These sectors are employment intensive and constitute the groups most affected by the earthquake. Projects to meet the labor shortage and skill needs in these areas should be supported and/or new projects should be developed. Within this framework;
  - In order to close the labor shortage in the shoemaking sector in Gaziantep, which has increased even more after the earthquake in areas such as shoe uppers and soles assembly, outboard and packaging operations, a collaboration with the local offices of Turkish

Employment Agency (İŞKUR) can be developed to employ suitable personnel. Through İŞKUR offices, projects can be developed to provide courses and training to job applicants who want to receive vocational training in these fields on the condition of employment guarantee.

- A textile production workshop will be established in İslahiye district of Gaziantep within the scope of Social Entrepreneurship, Empowerment and Cohesion Project (SEECO). It is envisaged that the products to be manufactured will be purchased through the social procurement model. In this framework, access to finance can be facilitated for the companies that will purchase the products through matching.
- In Hatay, the Leather Industrial Site has been completely destroyed and the manufacturing workshops to be located in the new leather industrial site to be established can be supported with loans or grants with favorable interest rates to cover the initial costs and supply technical equipment.
- New employment opportunities will need to be created in Adana, especially for earthquake victims who migrated from Hatay and Kahramanmaraş. In this context, financial support can be provided to facilitate the creation of production workshops in Adana for those who migrated to Adana from the destroyed Leather Industrial Site in Hatay, and ready-wear clothing and textile workshops for those who migrated from Kahramanmaraş.
- Sectoral accreditation projects can be supported to open the shoemaking, textile-garment and leather goods sectors to the European market.
- Cooperation with universities, vocational training centers, vocational high schools, and vocational universities can be developed. In this context, Gaziantep University, Gaziantep Chamber of Industry Vocational Training Center, and vocational high schools can be collaborated for trainings to provide vocational qualifications for people to be employed in the shoemaking sector in Gaziantep, which requires competence. Similarly, in Hatay, cooperation with agricultural vocational high schools and colleges can be developed to close the labor shortage in agricultural production.
- Recycling of waste is an activity that has intensified in the region after the earthquake and its management has gained importance. Within this framework;
  - Financing subsidies with employment requirements can be provided to employers to increase the capacity of existing demolition waste recycling facilities and/or for the establishment of new facilities.
  - Training can be provided for the personnel to be employed in the recycling of demolition wastes extracted from the rubble on issues such as waste sorting and waste management techniques. In this regard, funding can be provided to the Departments of Public Works of the relevant municipalities and technical - vocational trainings.
  - Studies on recycling technologies can be supported in cooperation with universities, research institutions and the private sector to develop recycling technologies and processes.
- It is expected that the activity of the construction sector will intensify in the reconstruction of cities, thus creating a need for labor force in the sector and other sectors affected by the construction industry. In this context, demand for workers is highest in Hatay, with occupations such as molders, masons, civil engineers and architects as reported in Hatay. Volunteers who have migrated between earthquake zones and lost their jobs can be supported for vocational training in these areas and financing can be provided for certificate programs.
- In the field study, demands were also concentrated in the following occupational groups. Funding can be provided for training and certificate programs that provide technical and vocational skills for these occupational groups:
  - Manufacturing Technical Personnel (*most needed in Adana*)
    - Machine Operator
    - Electrical-electronic Technical Staff

- Shoe Maker
- Agricultural Labor (most needed in Hatay)
  - Carding Machine Master
  - Cotton-Agricultural Worker
  - Olive-Agricultural Worker
- Sales and Marketing Expert (*most needed in Hatay*)
  - Sales Specialist with Strong Communication Skills
  - Marketing Expert with Technical Knowledge
- Accounting Expert (most needed in Hatay)
  - Accountant with Financial Knowledge
  - Accountant with Pre-Accounting Knowledge

### **Women Employment**

- Cooperation with women's cooperatives is important to support and/or increase women's employment. In this framework;
  - Training and capacity building programs can be organized for women's cooperatives on pre-disaster preparedness and post-disaster recovery. Thus, programs can be organized or financially supported to raise awareness of cooperative members about disasters and develop effective response skills in the event of a disaster.
  - Create a network for women's cooperatives to cooperate with each other and with relevant institutions. Support and/or financial support could be given to projects aimed at enabling information exchange, disseminating best practices, building solidarity and increasing employment.
  - Low-interest loans can be offered for private sector purchases as part of a social procurement program to ensure that women's cooperatives' products or services are purchased not only from a financial perspective, but also in consideration of their social and environmental impact.
- It is considered important to intervene in the problems of individuals who have lost their jobs, who have not yet been able to look for a job due to post-traumatic stress disorder and/or who have difficulty in finding a job, and it is considered that psychosocial empowerment support programs should be implemented for people affected by the earthquake and who have lost their jobs. In this framework;
  - Financial support can be provided to projects aiming to establish Community-Based Psychosocial Support Centers that can provide support such as group therapy, individual counseling, stress management trainings and social activities.
- In order to encourage women's participation in the labor force, it is important to provide nursery and day care center support. In this framework;
  - Financial support can be provided to make daycare centers accessible and increase their number in post-earthquake residential areas and business centers.
  - Financial assistance for daycare services and/or financial support programs for employers can be supported.
  - Collaboration can be developed locally by providing funding/grant support to Provincial Directorates of the Ministry of National Education, Provincial Directorates of the Ministry of Family and Social Security and municipalities.
- Training and support programs can be offered to enable women to re-enter the workforce. Cooperation and partnerships can be established between public institutions, non-governmental organizations, private sector and local governments for training and support programs that include topics such as improving job skills, job search and application process, preparation for job interviews.

## ***People with Disabilities***

- Financial support can be provided to employers in projects that encourage the participation of women and disabled employees in the labor force, in the effected areas.
- It is important to make workplaces suitable for women and people with disabilities. Physical arrangements should be made to ensure accessibility for people with disabilities and the workplace should be provided with the necessary equipment, technology or tools. Arrangements should be made to address the needs of women, such as breastfeeding rooms or childcare facilities. Appropriate financial support can be provided to employers for such workplace arrangements.
- It is planned to establish a "Children's Science Academy" in Adana for the development of science and art for children who have migrated to Adana. In this context, financial support can be obtained for the establishment of the academy, which is planned to be established in order to ensure the psycho-social development of women and children who migrated to Adana after the earthquake, and to encourage their orientation towards science and art.
- Syrians make up a significant portion of the labor force in Gaziantep in the production of shoes and clogs. According to the ILO report "Value Chain Analysis for the Gaziantep Footwear Sector", Syrians have started to produce women's shoes and clogs, which were not previously produced in Gaziantep, and have helped the footwear sector grow in the province. In this context, the employment of Syrians in the shoe production facility established in Nurdağı is important and it may be considered to condition the Syrian quota in the supported projects.
- The agricultural sector in Hatay has a high labor potential for both Syrian and Turkish citizens. Considering that the productivity of agricultural lands should not decrease, planting and harvesting processes should be carried out consecutively. With the establishment of a Rural Development Plan, agricultural lands will be utilized and employment will be encouraged. In this context, studies within the framework of the Rural Development Plan can be supported.
- Various recommendations have been made in the framework of identification, adaptation to the business world and employment of people with disabilities:
  - Vocational training programs can be organized for people with disabilities to improve their skills and gain new skills, and existing activities in this context can be supported.
  - Cooperatives supporting production by persons with disabilities may be established, products may be included in the social procurement program and/or projects within this scope can be supported. In this context, financial support and appropriate loan opportunities can be offered to meet the capital needs of disabled cooperatives such as renting a workplace, equipment supply, etc.
  - Support programs could be created for market access and promotion of the products of disabled cooperatives. Funding can be provided for activities such as branding, digital marketing, participation in fairs, etc.

## ***Projects Implemented and Other Collaborations***

- Within the scope of the Regional Development Oriented Recovery Emergency Action Plan (BOTAP) and SEECO project, it is aimed to encourage employment in the region by providing sales guarantees for the products produced by earthquake victims in production workshops, shops and workplaces that have been or will be established in the relevant provinces. Support can be provided to related projects in this direction. For example, cooperation with Development Agencies can be developed in areas where support cannot be provided (machinery supply and software purchases) as a large part of the budget of Development Agencies is transferred to BOTAP.
- Approximately 100,000 people are expected to be employed within the scope of Polateli-Şahinbey Organized Industrial Zones (OIZ) Textile City Project. In order to complete the infrastructure of the

project quickly, cooperation can be made with relevant institutions and organizations and financial support could be provided.

- Cooperation can be developed with regional Development Agencies and local employment organization representation in projects aimed at providing employment and increasing women's employment in OIZ and Small Industrial Sites (KSS) in the provinces.
- It is considered essential to develop support packages for sectors that are not covered by KOSGEB (small and medium enterprises development organization) supports, and to create grant or loan programs for earthquake victims regardless of sectoral discrimination.
- Through impact investing, financial support could be provided to companies and projects operating in the manufacturing and agricultural sectors that promote employment, financial returns, sustainable development and social change.
- B2B events aimed at building relationships between businesses and exploring opportunities for cooperation should be supported to boost trade in sectors where trade and employment have been lost due to the earthquake. In this context, cooperation can be made with embassies, chambers and stock exchanges in organizing business conferences and business summits, trade fairs and networking events.

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## Annex 1. Survey Questionnaire

### Response to the Türkiye Earthquake: Labor Force Assessment in the Affected Area (April 2023)

#### Objective of the assignment:

A rapid workforce survey/assessment has been conducted in the areas affected by the major earthquakes in Turkey last February. The main purpose is to reveal the workforce need for businesses and municipalities in the region to restart and/or continue their activities.

The expected output of the survey is (i) the positions/jobs demanded by different sectors and (ii) the skill needs/gaps related to these jobs to be defined by sector. With the assessment, it is aimed to obtain information about the general framework of labor needs of regional enterprises/municipalities after the earthquake..

#### 1. Company profile: Please indicate the main characteristics of your business, as follows.

##### 1.1. Sector

- Agriculture, Forestry, Fisheries
- Industry (except textile)
- Textile
- Services
- Information and Communications
- Construction
- Wholesail and Retail
- Transport and Storage
- Public Service

##### 1.2. Location of the business (city/district):

##### 1.3. Size

- Micro (less than 10 staff)
- Small (between 10 and 49 staff)
- Medium (between 50 and 249 staff)
- Large (250 staff and above)

#### 2. Workforce composition: Please specify the number of workers disaggregated by gender as follows:

	Female workers	Male workers
Total number of workers before the earthquake		
Number of workers employed and currently at work (not on leave)		
Number of workers lost/died		
Number of workers who left/moved elsewhere		
The number of workers who benefited from the EYT and retired		
The number of workers expected to leave the job after benefiting from the EYT as of January 2025		
Number of workers on long-term/medical/administrative leave (includes those with physical injuries/mental health support needs/family-related responsibilities etc.)		
Number of workers currently at work (not on leave) over the age of 50		

Number of workers with disabilities currently at work (not on leave)		
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**3. Workforce supply and demand by jobs:** Please specify the number of workers by function, as follows:

	<b>Managerial positions (senior/middle level manager, chief, unit supervisor etc.)</b>	<b>Technical positions (technician, engineer etc.)</b>	<b>Administrative positions (finance, accounting, HR etc.)</b>
Number of positions currently vacant, which need to be filled for the continuation of the business operations			
Number of positions occupied by those on long-term/medical/administrative leave (includes those with physical injuries/mental health support needs/family-related responsibilities etc.)			

**4. Some key questions for a gap analysis:**

- a. Considering the vacant jobs mentioned above, what would be the top three skills needed per job in order to resume/maintain your business operations? (when answering, please consider the disruptions/changes in supply chains, contractors, distributors, service recipients in the community etc. )

1 \_\_\_\_\_  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_

- b. What kind of support would you need for hiring people for those jobs with the skills in need? Please name three items.

1 \_\_\_\_\_  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_

**5. Questions for the Municipalities:**

**5.1.** Did you have any damage caused by the earthquake?

- Yes  
 No

**5.2.** If yes, what kind of damages you had?

- Building damage, destruction  
 Natural gas  
 Electricity  
 Plumbing  
 Internet

- Transportation
- Construction machinery
- Loss of workforce
- Associated with district municipalities (Please specify)
- Other (Please specify)

**5.3.** Please specify three of them require urgent solution?

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

**5.4.** What kind of support do you need for these solutions?

## **Annex 2. Survey Questionnaire - Development Agencies**

The following list of questions was used in the interviews with development agencies:

- 1) Can you briefly mention your activities/works in the region after the earthquake?
- 2) Have you worked on the need for labor force in the region? If so, could you share the results?
- 3) On the basis of the sector, in which areas do you think there is the most need for labor force currently?
- 4) And what policies do you think are needed to close this deficit? (Both in the short term and in the long term.)
- 5) How was women's employment in the region before the earthquake? Which challenges were encountered?
- 6) Did you work on improving women's employment in the region before the earthquake?
- 7) How did the earthquake affected women's employment? Can you share your policy recommendations on this matter after the earthquake?
- 8) How has the labor market participation of migrant groups and Syrians in the earthquake region changed after the earthquake? Which challenges were encountered? How can these challenges be overcome?
- 9) Do you work on employment of disabled people? How has the employment of disabled people been affected after the earthquake? What are your policy recommendations on this issue, if any?
- 10) What role do you think the EBRD can take in the implementation of these policies?

### Annex 3. Responses on barriers to business activities by province and scale

Main Categories	Survey Provinces	Adana					Gaziantep					Hatay					Osmaniye					Category Grand Total
	Scales	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total	
	Sub-categories																					
Barriers to Business Activities	Financing	0	0	0	0	0	2	5	1	0	8	8	5	5	0	18	0	0	0	0	0	26
	Physical Damage	0	0	0	0	0	2	0	0	1	3	11	3	2	1	17	1	0	0	0	1	21
	Zoning Permit Issue	0	0	0	0	0	1	0	0	0	1	5	6	3	1	15	2	0	0	0	2	18
	Workforce	0	0	0	0	0	1	1	0	1	3	8	1	2	0	11	1	0	0	0	1	15
	No Problem	0	0	0	0	0	1	8	2	0	11	0	0	0	0	0	0	0	0	0	0	11
	Other	0	0	0	0	0	1	3	0	0	4	0	2	3	0	5	0	1	0	0	1	10
	Accommodation	0	0	0	0	0	0	0	0	0	0	5	0	2	0	7	0	0	0	0	0	7
	Supply Problem	0	0	0	0	0	0	3	1	0	4	3	0	0	0	3	0	0	0	0	0	7
	Inflation Problem	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	3
	Migration	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	3
	Loss of Machinery and Equipment	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
	Expert Personnel Problem	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2

Source: TEPAV

## Annex 4. Workforce demand by occupations by province and scale

Main Categories	Survey Provinces	Adana					Gaziantep					Hatay					Osmaniye					Category Grand Total	
	Scales	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total		
	<b>Sub-categories</b>																						
Workforce demand by occupations	Manufacturing Technical Personnel	0	3	21	6	30	1	3	2	2	8	2	5	1	4	12	0	0	0	0	0	1	51
	Agricultural Technical Personnel	2	2	2	5	11	3	2	0	0	5	13	5	2	3	23	0	0	2	0	0	2	41
	Sales and Marketing Personnel	1	0	0	0	1	3	3	1	0	7	18	5	8	0	31	0	1	0	0	0	1	40
	Construction Technical Personnel	4	3	2	0	9	2	3	0	0	5	12	7	2	0	21	1	0	0	0	0	1	36
	Accounting	1	0	0	0	1	1	2	1	1	5	9	7	5	0	21	0	0	1	0	0	1	28
	Unskilled Employee	0	1	2	2	5	1	1	0	0	2	9	5	0	0	14	1	1	0	0	0	2	23
	Logistics Staff	1	1	1	0	3	0	0	2	0	2	7	8	1	0	16	1	0	0	0	0	1	22
	Textile Technical Staff	0	0	7	6	13	0	1	0	0	1	2	3	0	0	5	0	1	0	0	0	1	20
	Office Staff	0	0	0	0	0	0	0	0	0	0	11	2	1	1	15	1	0	0	0	0	1	16
	Other	0	0	0	0	0	1	1	2	0	4	3	1	5	0	9	0	0	0	0	0	0	13
	Accommodation and Food and Beverage Industry Employee	0	0	0	0	0	2	0	0	0	2	1	3	4	1	9	0	0	0	0	0	0	11
	Administrative Staff	0	0	0	0	0	0	0	0	0	0	4	1	2	0	7	0	1	0	0	0	1	8
	Foreign Language Employee	0	0	0	0	0	1	3	0	0	4	2	2	0	0	4	0	0	0	0	0	0	8
	Foreign Trade Specialist	0	0	0	0	0	0	0	2	0	2	2	1	0	0	3	0	0	0	0	0	0	5
	Automotive Repair Master	0	0	0	0	0	0	0	1	0	1	1	1	2	0	4	0	0	0	0	0	0	5
	Human Resources Specialist	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2

Source: TEPAV

## Annex 5. Proposed support areas by province and scale

Main Categories	Survey Provinces	Adana					Gaziantep					Hatay					Osmaniye					Category Grand Total
	Scales	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total	Micro	Small	Medium	Large	Province Total	
	Sub-categories																					
Proposed support areas	Credit and Financing Support	6	7	8	5	26	5	4	3	0	12	37	25	14	4	80	3	1	1	0	5	123
	Employment Incentive	5	5	14	6	30	7	4	2	0	13	22	26	8	7	63	2	3	2	0	7	113
	No need	8	1	0	0	9	28	13	1	0	42	1	1	1	0	3	0	0	0	0	0	55
	Workplace Support	0	0	0	0	0	1	1	1	0	3	16	12	7	1	36	0	1	0	0	1	40
	Housing Support	0	0	0	0	0	0	0	0	0	0	16	3	9	1	29	0	0	0	0	0	29
	Labor Support	0	0	3	1	4	2	6	1	2	11	8	1	0	0	9	0	0	0	0	0	24
	Social Equipment Support	0	0	0	0	0	0	0	0	0	0	4	8	1	3	16	0	0	0	0	0	16
	Cooperation with the Education Sector	0	2	5	1	8	0	3	2	0	5	1	0	1	0	2	0	0	0	0	0	15
	Tax Incentive	1	1	1	2	5	1	0	0	0	1	0	2	2	2	6	1	1	0	0	2	14
	Technical Equipment Support	0	0	0	0	0	0	0	0	0	0	7	1	0	0	8	0	0	0	0	0	8
	Market Support	0	0	0	0	0	0	1	1	0	2	3	1	0	1	5	0	0	0	0	0	7
	Other	1	0	1	0	2	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	6
	Foreign Trade Support	0	0	1	2	3	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	4
	Transportation and Shipping Support	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	4
	Agricultural Incentive	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2
	Ensuring Price Stability	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
EYT Related Support	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	
Supply Chain Support	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	

Source: TEPAV