

## Household Level Analysis of Rural-to-Urban Migration in Türkiye

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### ABSTRACT

This study employs micro-scale field research to explore the migration tendencies of the rural population in Türkiye, their attitudes toward agriculture, the structural characteristics of agricultural enterprises, and potential future dynamics. It also aims to examine the link between rural residents and agricultural activity. Data were collected through surveys conducted in 2,398 households across 224 villages/neighborhoods in 27 provinces. Findings indicate that approximately 67% of these locations are characterized as “out-migration areas.” The trend is especially pronounced in the Middle East (94.4%) and Central North (92.3%) regions, whereas the Mediterranean region (55.6%) exhibits a relatively higher rate of in-migration. Despite these migration trends, 79.7% of household heads reported no intention to leave their village or neighborhood, whereas 16.7% expressed a desire to migrate. However, many household heads stated that their children are more likely to consider migration. The primary motivation for those wishing to relocate is low income. These individuals typically prefer to move to the provincial or district centers and intend to do so with their entire families. Conversely, those choosing to remain cited reasons such as land ownership responsibilities, the high cost of living in urban areas, and a strong emotional attachment to rural life. The results of this study provide critical insights into the underlying drivers and outcomes of rural-to-urban migration. They offer valuable guidance for policymakers aiming to sustain agricultural production and mitigate migration through targeted, realistic strategies.

**Keywords:** Rural, Rural Migration, Household, Agriculture

## Türkiye’de Kırsaldan Kente Göçlerin Hanehalkı Düzeyinde Analizi

### ÖZ

Bu çalışmada, kırsal nüfusun göç eğilimleri, tarıma bakış açıları, tarımsal işletmelerin yapısı ve gelecekteki muhtemel durumlarını belirlemek, kırsalda yaşayan nüfus ve tarım arasındaki ilişkiyi tespit etmek için mikro ölçekte saha çalışmaları yapılmıştır. Saha çalışmalarında veri toplama tekniği olarak Türkiye’de 27 ilde 224 köy/mahalle ve buralarda yaşayan 2398 hane incelenmiştir. Köy/mahallelerin göç durumlarına yönelik yapılan incelemelerin sonuçlarına göre Türkiye genelinde %67 oranında “göç veren bir köy/mahalle” olgusunun öne çıktığı söylenebilir. Özellikle Orta Doğu (%94,4) ve Orta Kuzey (%92,3) bölgelerindeki köy/mahallelerin yüksek oranda göç veren köy/mahalle olduğu buna karşın Akdeniz Bölgesindeki köy/mahallelerin (%55,6) göç alan köy/mahalle olduğu belirlenmiştir. Diğer taraftan bu köy/mahallelerde yaşayan hane reislerinin genel olarak %79,7’sinin köy/mahallelerinden göç etme isteği bulunmazken %16,7’sinin göç etme isteği olduğu tespit edilmiştir. Hane reisleri göç etme niyetinin çocuklarında var olduğunu ifade etmişlerdir. Daha çok gelir yetersizliği bahanesiyle göç etmek isteyen hane reisleri göç etmek istedikleri yerler için genel olarak bağlı oldukları il/ilçe merkezini tercih etmekte ve ailesinin tamamı ile birlikte göç etmek istemektedirler. Bölgelerinden göç etmek

istemeyen hane reisleri ilgilenmesi gereken arazilerinin varlığı, şehirde geçinmenin zor olacağı, köy/mahalle hayatını vazgeçemeyecek seviyede sevdiği gibi sebepler ileri sürmektedir. Çalışma sonuçlarının kırsaldan kente göçün olası nedenleri ve sonuçlarını ortaya koyması bakımından önemli olduğu ve tarımsal üretimin devamlılığının sağlanması ve göçlerin makul düzeyde önüne geçilebilmesi anlamında politika yapıcılara ışık tutacağı söylenebilir.

**Anahtar kelimeler :** Kırsal, Kırsal Göç, Hane Halkı, Tarım

## INTRODUCTION

Rural-to-urban migration has historically played a critical role in shaping demographic dynamics, often resulting in notable population declines in rural settlements and giving rise to significant social, cultural, and economic shifts. Villages, traditionally seen as hubs of agricultural production, have also served as key residential zones that host a substantial segment of the national population. However, the persistent migration of educated, young, and economically active individuals signals a long-term disengagement from the agricultural sector posing potential risks to the future vitality and structure of agricultural entrepreneurship. In this context, preserving the rural workforce and encouraging specialization in agricultural occupations is essential for ensuring rural prosperity, sustaining agricultural productivity, and supporting sectoral resilience.

Extensive scholarly research has investigated the causes and consequences of migration, particularly focusing on internal migration dynamics. A considerable body of work has addressed the interprovincial disparities in variables such as population size, income levels, geographic distance, education, and wages (Gawande et al., 2000; Huaraz, 2000; Aroca and Hewings, 2002; Devillanova and Garcia-Fortes, 2004; Miguel et al., 2006; Ederveen et al., 2007). Other studies have examined the influence of age, wealth, inflation, employment, and security concerns (e.g., terrorism) on migration decisions (Pazarlıoğlu, 2007; Çatalbaş and Yazar, 2015; Mueller et al., 2018). Furthermore, specific attention has been directed toward rural migration drivers such as income variability, land ownership, education access, healthcare availability, land fragmentation, labor force dynamics, disease prevalence, mortality rates, crime levels, and proximity to urban centers (Shrestha et al., 1993; Butzer et al., 2002; Aşkın et al., 2013; Oğuz et al., 2016).

In the Turkish context, rural migration has been examined within both historical and economic frameworks. Since the 1950s—parallel to industrialization efforts—rural-to-urban migration has been perceived as a facilitator of national development (Yavuz et al., 2004). Particularly after the 1980s, significant migration flows have been observed, influenced by nationwide socio-economic transformations (İçduygu et al., 1998; Çınar and Lordoğlu, 2011; Aşkın et al., 2013). Several studies highlight how the gradual withdrawal of government support for agriculture, the imposition of production quotas, and increasing input costs have destabilized rural economies, driving households toward cities in search of financial stability (Lordoğlu, 2006; Karabulut and Polat, 2007).

For example, Bostan (2017) identified a combination of inadequate healthcare and education services, limited social infrastructure, severe climate conditions, and urban employment prospects as key migration motivators in the eastern provinces of Ağrı, Kars, Iğdır, and Ardahan. Similarly, research conducted in the Emirdağ district of Afyon revealed that rural depopulation—particularly pronounced after the 1960s—has led to widespread village abandonment, with the remaining populations often composed of elderly individuals, thus impeding agricultural continuity (Yakar and Yazıcı, 2009). In a study conducted in Van, Zirhlioğlu (2010) found that persistent migration from rural areas was largely driven by regional income disparities, unemployment, and security concerns, especially in eastern Anatolia, further underscoring migration as a critical challenge for the agricultural sector.

Against this backdrop, the present study seeks to explore the rural population's migration tendencies, their views on agriculture, the structure of agricultural enterprises, and potential future trajectories. To this end, micro-scale field research was carried out to examine the relationship between rural populations and agricultural activity. The fieldwork involved data collection from 2398 households across 224 villages or neighborhoods within 27 provinces throughout Turkey.

## MATERIALS AND METHODS

This study utilized Turkey's nine agricultural production regions, as designated by the Food and Agriculture Organization to construct a representative sampling framework (Anonymus, 2018). Initially, three provinces were selected from each agricultural region to reflect the diverse characteristics of the area. The selection criteria included geographical diversity, the average net migration rates between 2008 and 2020 (13-

year average), and relevant economic and temporal considerations (see Table 1). As a result, the study encompassed 27 provinces across the country.

In selecting provinces, care was taken to include those with varying migration patterns provinces that were major sources of out-migration, those receiving high levels of in-migration, and those with moderate migration flows. This strategy allowed for a more balanced and inclusive assessment of migration tendencies by incorporating regions with differing demographic dynamics.

**Table 1.** Provinces surveyed

Regions	Provinces and Net Migration Rates (The average net migration rates between 2008 and 2020)
Central North	Yozgat (-18.03), Çankırı 1.71), Eskişehir (8.67)
Aegean	Manisa (0.52), Isparta (1.19), Muğla (9.64)
Marmara and Thrace	Edirne (0.30), Sakarya (5.04), Tekirdağ (18.80)
Mediterranean	Kilis (-5.86), Mersin (-0.59), Antalya (10.88)
North East	Ağrı (-23.68), Artvin (-3.08), Erzincan (-0.26)
South East	Muş (-21.46), Şanlıurfa (-6,01), Batman (-3.06)
Black Sea	Zonguldak (-8.63), Gümüşhane (-0.44), Sinop (2.92),
Middle East	Adıyaman (-9.82), Tokat (-8,69), Tunceli (0.70)
Central South	Niğde (-5.10), Konya (-1.52), Kayseri (1.58)

**Sources:** Calculated by researchers

The target population for the field study was defined by examining interprovincial migration trends across age groups to identify segments most likely to migrate. According to Anonymous (2019), the total rural/neighborhood population across the selected provinces amounted to 1349610 individuals. The sample size was calculated using the following formula from Çiçek and Erkan (1996):

$$n = N(pq) / (N-1)D^2 + (pq) \quad (1)$$

Where:

n = required sample size,

N = total population size,

D = allowable margin of error (calculated as d/t, with d = 2% and t = 95% confidence level),

p = probability of an individual remaining in agriculture (assumed to be 0.5),

q = 1 - p.

Based on this formula, the required sample size was determined to be 2398 individuals. This sample was proportionally distributed across the nine agricultural regions and their corresponding 27 provinces. Accordingly, fieldwork was conducted in 224 rural settlements (villages/neighborhoods) selected from these areas. The geographical focus of the research included rural areas located outside urban centers, encompassing rural neighborhoods within the jurisdiction of metropolitan municipalities. The locations for data collection were identified with assistance from provincial and district agricultural and forestry directorates. Field visits were organized in consultation with local authorities, such as village headmen or other informed community members, to gather preliminary information about the settlement's general structure and migration patterns. In addition to this contextual data, structured face-to-face interviews were conducted with household heads (owners of agricultural enterprises), both male and female. These interviews aimed to collect detailed information on agricultural production structures, including land holdings, livestock numbers, and annual income levels. Participants were also asked about their migration intentions and challenges related to agricultural life, as well as their proposed solutions. The data obtained from 224 village-level interviews and 2,398 household surveys were analyzed separately. Household data were evaluated using descriptive statistics presented in tables and graphs, including percentage distributions and frequency analyses. With the data obtained from a total of 2,622 surveys, many characteristics of households living in rural areas in Türkiye, such as their living standards, socio-economic and demographic characteristics, and agricultural business structures, have been revealed. In the light of all this information, the main subject of the study, the migration trends of households from rural areas, have been examined in all aspects. The findings obtained in the study have been presented with statistics on the scale of all of Türkiye and by region. In this sense, comparative evaluations were made by calculating frequencies and

percentages for both Türkiye and regional averages. Frequency and percentage statistics are presented with tables and colored figures.

## RESULTS AND DISCUSSION

### Infrastructure status, education, and health services in villages/ neighborhoods

The study collected data regarding the infrastructure facilities of the surveyed villages and neighborhoods. A general observation reveals that most settlements are connected to main roads. However, approximately 10% of the villages/neighborhoods located in the Northeastern, Southeastern, and Central Eastern regions were found to lack proper main road access (Figure 1). In terms of potable water supply, a notable deficiency was identified in the Northeastern and Southeastern regions, where 20–23% of the villages/neighborhoods do not have access to a drinking water network. In contrast, villages in other regions are largely equipped with such infrastructure (Figure 2). When it comes to sanitation, around one-third of the surveyed settlements lack a sewage system. The absence of this infrastructure is most pronounced in the Mediterranean region (70.4%), followed by the Marmara and Thrace region (50.0%). In contrast, regions such as Central East (94.4%), Central North (84.6%), and Southeast (83.3%) demonstrate comparatively better development in sewage system availability (Figure 3).

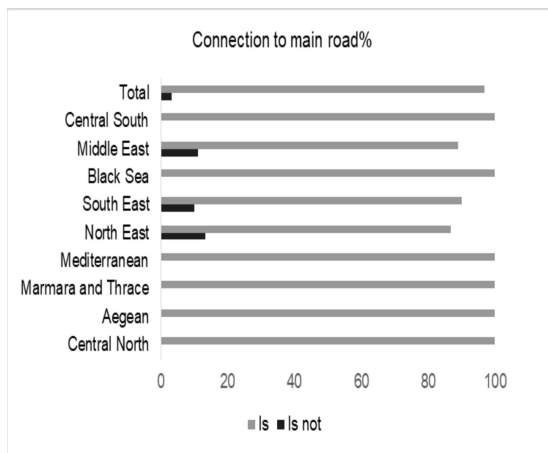


Figure 1. Connection status to the main road

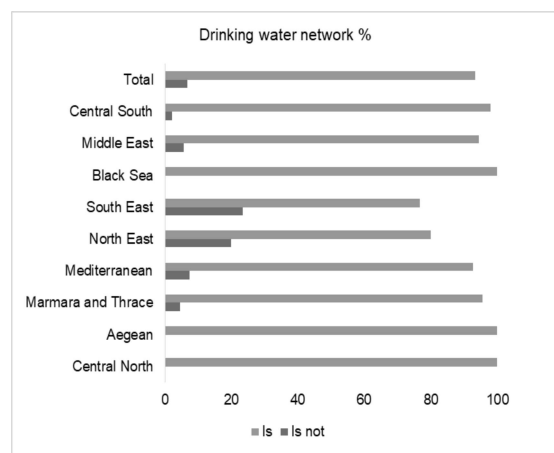


Figure 2. Drinking water network status

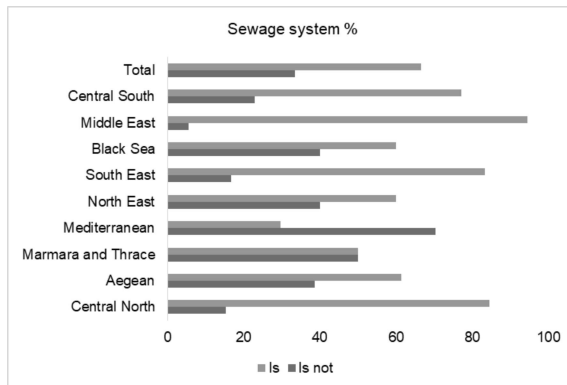


Figure 3. Existence of sewerage system

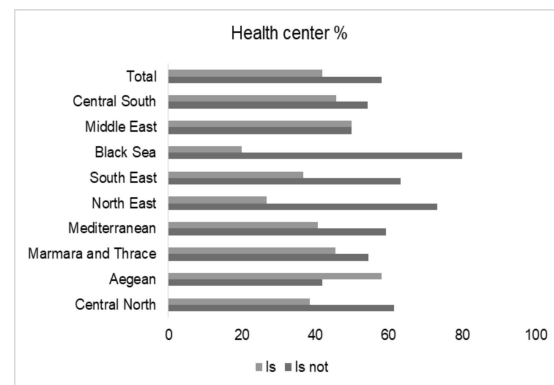


Figure 4. Existence of a health center

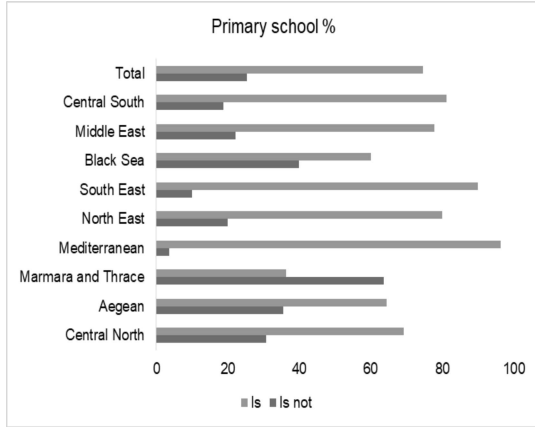


Figure 5. Existence of primary school

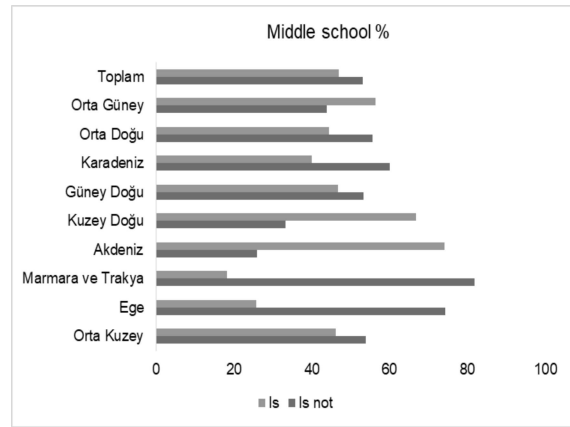


Figure 6. Existence of middle school

The analysis revealed that 58% of the surveyed villages and neighborhoods lack a local healthcare facility. In locations where such facilities are present, they typically operate under the Ministry of Health's family medicine model (Figure 4). However, in most rural settlements excluding larger towns that were temporarily granted neighborhood status under metropolitan municipality legislation there are no fully functioning health centers or family health centers operating on a daily basis. Family health centers in rural areas mainly provide basic medical examinations and conduct simple laboratory tests. As part of the family medicine system, healthcare professionals deliver mobile health services on specific days of the week to patients who are too ill or isolated to travel to centralized facilities. These mobile units are designed to serve remote or underserved communities including villages, hamlets, and outlying neighborhoods and are implemented in line with planned schedules that consider geographic, climatic, and transportation factors. According to the official regulation (Official Gazette, 2010), the duration of healthcare service provided per 100 people in a rural area must not be less than two hours per month, excluding travel time. Mobile healthcare visits are required at least once a month for settlements with populations up to 250, twice a month for those between 250–500, and at least once a week for areas with more than 500 residents. When available, Ministry-owned health facilities in these regions can also be used to support service delivery.

Regarding educational infrastructure, 75% of villages and neighborhoods were found to have a primary school, while 47% had a middle school, and only 7% had a high school (Figures 5 and 6). Nevertheless, due to factors such as low or dispersed populations, seasonal migration, and a limited number of students, many primary schools under the Ministry of National Education are closed, despite having physical structures in place. In these cases, students are transported daily to central schools in nearby districts. According to national guidelines (Official Gazette, 2014), this transport distance must range between a minimum of 2 kilometers and a maximum of 50 kilometers. In terms of transportation infrastructure, 77% of the settlements have access to daily minibus services connecting them to district centers. However, in the Southeastern and Central Eastern regions, about 40% of the surveyed areas lack such services. In contrast, daily transport availability is highest in the Central Northern (93%) and Mediterranean (89%) regions.

#### Topography and agricultural land structure

The analysis of village topography showed that 60% of the settlements are situated on plains, 25% on slopes, and 15% in mountainous terrain. The average land size per household varied by region and terrain. In the Mediterranean and Black Sea regions, the average holding is approximately 24–30 decares, whereas in the Southeastern and South-Central regions, this figure rises to 115 and 122 decares, respectively. On a national scale, the average landholding is calculated as 72 decares. The proportion of irrigable land also varies across regions. The Mediterranean and South-Central regions have the highest share of irrigated land, at 58%. Across all regions, irrigable land accounts for approximately 47% of total agricultural land. When pasture sufficiency for livestock activities is considered, the Central Eastern region stands out, with 77% of settlements indicating adequate pastureland. However, availability is inconsistent across villages, with some reporting sufficient pastureland while others experience shortages.

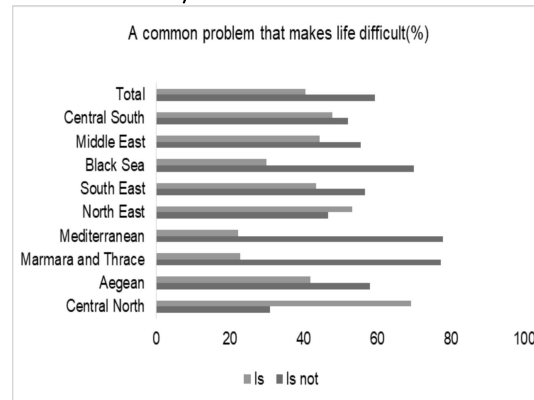
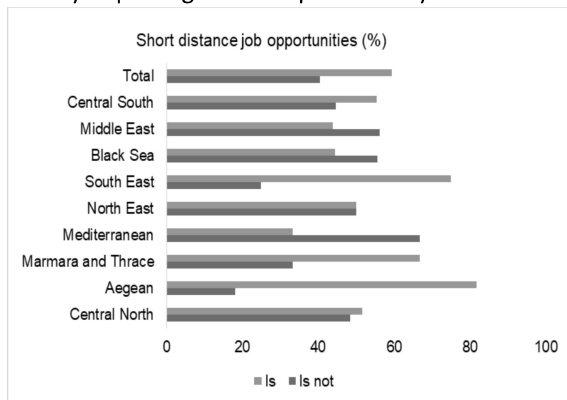
#### Livestock activities in villages/neighborhoods

Based on statements from local headmen or council members, livestock farming including both small and large ruminant husbandry is common across the surveyed regions. Beekeeping activities were also reported. The average number of households engaged in livestock farming, as well as the average number of animals, varies by

regional agricultural patterns. The Northeastern region recorded the highest number of households involved in cattle farming (72 households), followed by the Southeastern (69 households) and South-Central (62 households) regions. The Northeastern region also ranks highest in terms of both the number of animals and beehives. This is largely attributed to the region’s extensive grasslands, pastures, and meadows, which provide ample forage and reduce feed-related constraints. In addition, the region’s rich floral diversity creates favorable conditions for beekeeping.

#### Employment opportunities and common problems

The study also assessed the availability of employment opportunities either within the villages or in nearby areas accessible for daily commuting. Results showed that the Aegean and Southeastern regions offer the most opportunities for daily wage employment, particularly in agriculture-based industries and the services sector (Figure 7). When asked about pressing local issues, 60% of village headmen or council members reported no significant challenges affecting daily life. However, 40% indicated the existence of major problems, most commonly related to irrigation, product marketing, and labor shortages (Figure 8). These challenges can directly impact agricultural productivity and the livelihood sustainability of rural households.



**Figure 7.** Existence of short-distance job opportunities **Figure 8.** The existence of a general problem

#### Administrative transformation, demographic structure, and migration dynamics in rural areas

Following the implementation of Law No. 6360, which restructured metropolitan municipalities in Turkey, many villages and towns were reclassified as neighborhoods. Today, provinces with metropolitan status comprise approximately half of Turkey’s land area and around 75% of its total population. In recent years, efforts have been made to distinguish between urban and rural neighborhoods within metropolitan municipalities, and in some provinces, the concept of the "rural neighborhood" has begun to take shape. Since this study covers rural areas nationwide, the term "rural settlements" refers not only to traditional villages but also to rural neighborhoods and former towns whose legal status has been dissolved. Among the surveyed settlements, the Mediterranean region stands out with the highest average number of households per village/neighborhood (738), followed by the South-Central (412) and Central Eastern (312) regions.

Regarding year-round residence, 90% of households in the Aegean region occupy their homes permanently. In contrast, only 47% of households in the Black Sea region reside in their homes throughout the year. Across all regions, about 10% of households living in villages or neighborhoods are not engaged in agriculture. Additionally, approximately 6–7% of households are composed of individuals who have migrated elsewhere but either lease or share their land with others or return periodically to engage in agricultural production. The proportion of households that have permanently relocated and sold their land and assets is generally around 6%, but this figure rises to 13% in the South-Central region, 12% in the Northeastern region, and 8% in the Central Eastern region.

#### Rural development support, cooperatives, and population characteristics

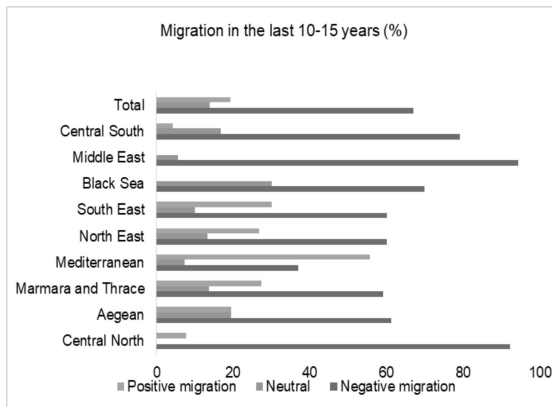
The findings show that, on average, only two households per village receive rural development investment support. In terms of social assistance, about 24 households per settlement benefit from aid programs. The prevalence of agricultural development cooperatives remains low, with over 70% of villages lacking any cooperative organization. However, cooperative activity is relatively higher in the Marmara and Thrace, Mediterranean, and Aegean regions. When examining average village/neighborhood populations, the Mediterranean region again emerges as the most populous, while the lowest average populations are observed in the Marmara and Thrace regions.

**Migration trends in villages/neighborhoods**

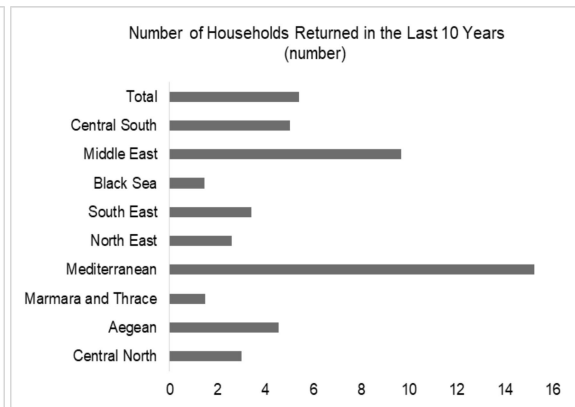
In response to the question directed at village/neighborhood headmen and local leaders about whether their settlement has been primarily receiving or sending migrants over the past 10–15 years, 67% of all responses identified their area as a “migration-sending” settlement. The highest out-migration rates were reported in the Central Eastern (94.4%) and Central Northern (92.3%) regions, while the Mediterranean region (55.6%) recorded the highest in-migration rates (Figure 9). An analysis of migration destinations shows that 53.1% of migrants move to the district or provincial centers to which their village is administratively connected (Table 2). In terms of return migration over the past 10–15 years, the Mediterranean region ranks first with 15 households returning, followed by the Central Eastern region with 10 households (Figure 10). The main reasons cited for returning include emotional attachment to the village and financial difficulties encountered in urban areas.

**Table 2.** General migration destinations of families

		Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
Provincial-district center	N	2	19	22	22	0	15	1	4	34	119
	%	15.4	61.3	100.0	81.5	0.0	50.0	5.0	22.2	70.8	53.1
Another provincial center	N	6	12	0	5	15	13	16	11	9	87
	%	46.2	38.7	0.0	18.5	100.0	43.3	80.0	61.1	18.8	38.8
Abroad	N	5	0	0	0	0	2	3	3	5	18
	%	38.5	0.0	0.0	0.0	0.0	6.7	15.0	16.7	10.4	8.0
Total	N	13	31	22	27	15	30	20	18	48	224
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



**Figure 9.** Rural-urban migration status



**Figure 10.** Return to rural areas

**Household survey findings – demographic characteristics of respondents**

All household-related data collected in the study were analyzed and presented both regionally and in aggregate through structured tables. Table 3 outlines the demographic characteristics of the individual identified as the head of household, who, in most cases, is also the agricultural enterprise owner. However, recognizing that some respondents were not actively engaged in farming, the term "head of household" is used here to represent either the male or female respondent responsible for household decisions. Key demographic indicators such as age, education level, marital status, and social security coverage were examined. The average age of household heads is consistent across regions, with a national mean of 48.4 years. Güreşçi and Yurttaş (2008) found that the number of young heads of households in rural areas was very low due to migration, with households typically consisting of two individuals living together with their spouses. Yakar (2012) reported in their study that the number of heads of households aged 65 and over was four times higher than that of heads of households under the age of 35, noting that the vast majority of adult children had migrated in search of employment opportunities. The gender distribution reveals a significant predominance of male respondents, accounting for 93% of all household heads. In terms of education, 44% of household heads reported having completed primary school, while only 5.3% held a degree from a university or faculty. Marital status data indicate

that 94% of respondents are married. Additionally, 75% of household heads are covered by a form of social security.

**Table 3.** Demographic information of the household head

		Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
Average Age		47.4	50.4	47.6	49.4	48.0	46.6	51.0	49.3	47.2	48.4
Gender											
Female	N	0	0	12	23	0	69	12	29	17	162
	%	0.0	0.0	5.5	6.1	0.0	12.3	9.3	16	5.5	6.8
Male	N	99	357	208	354	165	493	117	152	291	2229
	%	100.0	100.0	94.5	93.9	100.0	87.7	90.7	84.0	94.5	93.0
Total	N	99	357	220	377	165	562	129	181	308	2398
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average number of individuals in the household		4.25	3.84	4.56	3.83	5.68	6.4	4.47	4.63	4.66	4.85
Education status											
No literacy	N	0	0	2	2	1	17	1	0	8	31
	%	0	0	0.9	0.5	0.6	3	0.8	0	2.6	1.3
Primary school	N	14	167	124	135	72	278	59	87	117	1053
	%	14.1	46.8	56.4	35.8	43.6	49.5	45.7	48.1	38	43.9
Middle school	N	24	72	32	89	45	107	16	40	77	502
	%	24.2	20.2	14.5	23.6	27.3	19	12.4	22.1	25	20.9
High school	N	50	96	47	137	47	137	40	48	82	684
	%	50.5	26.9	21.4	36.3	28.5	24.4	31	26.5	26.6	28.5
University	N	11	22	15	14	0	23	13	6	24	128
	%	11.1	6.2	6.8	3.7	0	4.1	10.1	3.3	7.8	5.3
Total	N	99	357	220	377	165	562	129	181	308	2398
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Marital status											
Married	N	96	344	210	339	147	543	114	173	279	2245
	%	97.0	96.3	95.5	89.9	89.1	96.6	88.4	95.6	90.6	93.6
Single	N	3	13	10	38	18	19	15	8	29	153
	%	3.0	3.7	4.5	10.1	10.9	3.4	11.7	4.4	9.4	6.4
Total	N	99	354	220	377	165	562	129	181	308	2398
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Social security											
None	N	19	39	32	66	52	261	19	65	41	594
	%	19.2	10.9	14.5	17.5	31.5	46.4	14.7	35.9	13.3	24.7
There is	N	80	318	188	311	113	301	110	116	267	1804
	%	80.8	89.1	85.5	82.5	68.5	53.6	85.3	64.1	86.7	74.7
Total	N	99	357	220	377	165	562	129	181	308	2398
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Current household assets: past and future outlook**

As part of the survey, household heads were asked about their current assets, including land ownership, livestock holdings, residential property, and agricultural structures such as barns. In addition, their current debt status was also explored. The responses varied depending on the type and nature of assets reported (Table 4). The data collected also offer insight into changes in household wealth compared to ten years ago, as well as expectations regarding asset status over the next decade. On the other hand, considering that small family enterprises are predominant in rural areas, it can be observed that land and livestock ownership typically resides with the father as long as he is alive, thereby perpetuating his authority within the household (Ayyıldız et al.).

**Table 4.** Current assets of the household

	Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
Owned land (da)	340.1	21.2	97.4	23.3	65.4	60.8	29.2	49.4	237.6	84.4
Rent (da)	130.3	6.0	55.8	7.1	8.3	19.8	9.0	12.2	92.1	31.0
Partner (also)	44.9	3.4	23.9	2.4	12.4	5.5	9.9	6.7	29.0	11.9
Cattle (head)	4.9	2.8	18.6	1.3	20.0	1.6	6.3	4.6	9.7	6.2
Ovine (head)	25.3	9.4	14.8	6.1	23.7	13.5	3.8	19.4	39.5	16.3
Stable (head)	10.9	10.0	19.5	3.3	29.2	7.2	12.9	8.8	25.8	12.6
Corral (head)	42.7	16.3	23.7	14.2	38.1	24.3	9.7	27.8	73.7	29.0
Tractor	0.8	0.7	0.8	0.8	0.5	0.6	0.6	0.6	0.8	0.7
Home	2.1	2.1	2.3	2.2	2.0	2.1	2.1	2.0	2.1	2.1
Income	2.1	1.9	2.2	2.1	1.9	1.8	2.1	2.1	2.2	2.0
Debt	2.1	2.1	2.3	2.2	2.2	2.0	2.3	2.2	2.2	2.1

Note: House; if old, 1. if available, 2. if new, 3. Tractor; if no, 0. if available, 1. Income; if bad, 1. if moderate, 2. if good, 3. Debt; if much, 1. if moderate, 2. if little, 3.

#### Household asset status: retrospective and prospective evaluation

Respondents were asked to provide clear and quantifiable information regarding their asset ownership. For instance, land assets were reported in decares, livestock in headcount, while income levels were assessed on an ordinal scale as “poor,” “moderate,” or “good,” and debt status was categorized as “high,” “moderate,” or “low.” This method enabled households to self-assess their economic situation within a structured and comparable framework. According to the aggregated results across all regions, the average landholding per household was found to be 84 decares. On average, households owned 6.2 head of large livestock and 16.3 head of small livestock. Moreover, barn and shelter capacities were reported to be roughly double the size of the existing animal population. Almost all households owned at least one tractor, and their homes were described as livable and functional. In general, both income and debt levels were evaluated as moderate (Table 4).

Household heads were also asked to compare their current asset status with that of ten years ago, as well as to project potential changes for the next decade. This comparative perspective provides valuable insights into the sustainability of agricultural production at the household level. The retrospective evaluation revealed that, ten years ago, most households possessed greater land and livestock assets, with correspondingly larger barn and shelter capacities. It was also noted that many households, which now own at least one tractor, previously owned multiple tractors. Their homes were relatively newer at the time, and although household income was higher, debt levels were also reported to be more burdensome (Table 5).

**Table 5.** Comparison of the household's assets 10 years ago with the current situation

	Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
Owned land	2.1	2.1	2.0	1.9	2.0	2.0	2.1	1.9	1.7	1.9
Rent	2.0	2.1	1.8	2.0	2.0	2.0	1.9	1.9	1.8	1.9
Partner	1.7	1.9	1.8	2.0	2.0	2.0	1.9	2.0	1.9	2.0
Bovine	1.8	2.0	1.7	2.0	2.3	2.1	2.3	1.7	1.9	2.1
Small Bovine	2.1	2.1	2.2	2.0	2.0	2.1	2.0	1.3	2.0	2.0
Stable	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.8	1.9	2.0
Corral	2.0	2.0	1.9	2.0	1.9	2.0	2.0	1.3	1.9	1.9
Home	2.0	2.0	1.9	1.9	2.0	2.0	1.9	2.3	1.9	2.0
Tractor	2.0	2.0	1.9	1.9	2.0	1.9	1.9	2.0	1.9	2.0
Income	1.9	2.1	2.0	2.0	2.2	2.2	2.1	2.1	2.1	2.1
Debt	2.2	2.1	2.2	2.3	2.2	2.4	2.3	2.0	2.2	2.3

Note: 1 if less, 2 if same, 3 if more

#### Asset expectations of households for the next decade

When comparing current asset levels with projections for the next ten years, most household heads across regions anticipate little to no change in their overall asset holdings. Despite this, there is a prevailing expectation

of increased income in the coming decade. Many respondents believe that, although they do not foresee an expansion in livestock numbers primarily due to rising feed costs and maintenance expenses—their income growth will be driven by the expansion of land ownership. However, the outlook on debt is more pessimistic. A significant proportion of households expect their debt burden to grow over the next ten years (Table 6). These expectations reflect both economic uncertainties and structural challenges in rural agricultural systems, particularly in relation to input costs and financial sustainability.

**Table 6.** Comparison of potential assets of household in 10 years with the current situation

	Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
Owned land	2.5	2.5	2.2	2.5	2.8	2.6	2.8	2.6	2.5	2.5
Rent	2.6	2.9	2.5	2.8	3.0	2.9	2.8	2.8	2.7	2.8
Partner	2.9	2.8	2.8	3.0	3.0	2.9	2.7	3.0	2.9	2.9
Bovine	2.7	2.7	2.3	2.9	2.5	2.7	2.1	2.2	2.7	2.6
Small Bovine	2.9	2.9	2.6	2.9	2.8	2.8	2.9	1.8	2.8	2.7
Stable	3.0	2.9	2.8	3.0	2.9	2.9	2.9	2.5	2.8	2.9
Corral	3.0	3.0	2.9	3.0	3.0	2.9	3.0	1.8	2.9	2.9
Home	2.9	3.0	2.8	3.0	3.0	2.9	2.9	2.5	2.8	2.9
Tractor	2.9	2.9	2.7	2.9	2.9	2.8	2.9	2.9	2.8	2.9
Income	1.9	2.5	2.7	2.3	2.1	2.4	2.2	2.1	2.5	2.4
Debt	2.1	2.4	2.1	2.1	2.4	2.3	2.0	2.8	2.5	2.2

#### Minimum agricultural resources required for household livelihood

As part of the survey, household heads were asked to estimate the minimum amount of land and livestock needed for a family to maintain a basic livelihood in their region. The responses to this question are summarized in Table 7. According to the findings, it was determined that, on average, a household requires approximately 81 decares of irrigated land, 90 decares of dry land, 16 head of large livestock, and 70 head of small livestock to sustain a viable living. These estimates vary across regions, reflecting differences in climate conditions, land productivity, and agricultural potential.

**Table 7.** Average land and livestock assets for a family's minimum standard of living in the region

	Land Asset (da)		Livestock Asset (head)	
	Irrigated Land	Dry Land	Cattle-Buffalo	Sheep-Goat
Central North	220.4	239.6	12.8	33.2
Aegean	26.3	39.3	14.8	69.7
Marmara and Thrace	66.2	129.1	23.4	72.9
Mediterranean	25.0	63.5	12.8	73.5
North East	124.2	51.4	34.7	82.1
South East	77.1	100.7	11.0	60.3
Black Sea	47.3	18.0	17.5	58.9
Middle East	84.0	91.3	7.7	64.1
Central South	173.7	138.3	18.8	97.9
General	80.8	90.3	15.8	70.3

#### Perceptions of agricultural income sufficiency and non-agricultural income sources

While most household heads expressed that their current agricultural income is generally insufficient, some indicated that it fluctuates between being adequate and inadequate depending on the circumstances. Regionally, perceptions of insufficient income were most prevalent among respondents in the Southeastern and Northeastern regions. In contrast, household heads in the Mediterranean and Central Northern regions tended to describe their income as neither sufficient nor insufficient. When non-agricultural income sources were analyzed, it was found that over 50% of households in the Black Sea, Marmara–Thrace, Aegean, and Southeastern regions had access to income outside of agricultural activities. The highest average annual non-agricultural income was observed in the Black Sea region, amounting to 2,381.5 \$ while the lowest was recorded in the Central Eastern region at 914.2 \$. Across all regions, the average annual non-agricultural income stood at 1,328.3 \$.

Regarding their perceived income status compared to other households in the same village, 66% of respondents reported that their income was "neither sufficient nor insufficient." This perception likely stems from the inherent volatility of agricultural production, which is heavily influenced by natural conditions, fluctuating market prices, and rising input costs. Moreover, in rural contexts where livelihood expectations are often shaped by a more fatalistic worldview, income sufficiency is sometimes equated with simply avoiding hunger and homelessness suggesting that "adequacy" is a highly subjective and relative concept. Meanwhile, the share of respondents who considered their income to be sufficient in comparison to other villagers was 25%, and these households were predominantly located in the South-Central, Black Sea, and Marmara–Thrace regions.

**Household heads' intentions to migrate**

The survey inquired whether household heads had intentions to migrate from their current village or neighborhood. Nationally, 79.7% of respondents reported no desire to leave their rural communities, while 16.7% expressed a willingness to migrate. Regionally, the highest inclination to migrate was observed among respondents in the Southeastern region, where 31.7% indicated an intention to relocate. Conversely, the lowest rate of migration intention was recorded in the Central Northern region, suggesting greater attachment or satisfaction with local living conditions in that area.

**Factors influencing migration decisions of household heads**

The Central Eastern region had the highest rate of undecided respondents regarding migration intentions, with 8.8% expressing uncertainty. In contrast, the Central Northern region recorded the highest proportion of household heads who firmly stated they did not intend to migrate. Among those considering migration, the majority indicated a preference for relocating to the provincial or district center to which they are administratively connected, and most expressed a desire to move with their entire family. When household heads who were not inclined to migrate were asked about their reasons (Table 8), responses revealed a wide range of economic, social, and emotional factors. Across all regions, the most frequently cited reason (58.5%) was the need to manage agricultural land. Additionally, 33.8% stated they would not be able to sustain themselves financially in urban settings, 30.5% mentioned their responsibility to care for livestock, and 30.4% reported that their current income in the village was sufficient. On the social and emotional side, 49.6% expressed a deep attachment to rural life, while 40.6% noted that their age made relocation impractical. Furthermore, 31.7% indicated that they could not imagine leaving the village where they were born and raised.

**Table 8.** Reasons for household heads who do not want to migrate (%)

	Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
I have land to take care of	66.7	62.7	79	69.2	58.4	36.9	55.6	40.5	63.4	58.5
I love rural life. I can't give it up	36.7	53.5	69.6	63.8	50.4	38.5	41.9	35.9	43.4	49.6
I can't leave the rural at my age	28.9	38.9	57.5	35.6	53.6	32.8	60.7	31.3	40.8	40.6
I can't make a living in the city	41.1	60.1	18.2	32.6	34.4	37.4	28.2	27.5	27.2	35.7
The city is not attractive. too crowded and complicated	25.6	25.7	56.4	37.7	37.6	28.1	39.3	26.7	32.5	33.8
I can't leave the rural where I was born and raised.	21.1	18.2	58.6	41	38.4	27.9	24.8	16	34	31.7
I have livestock to take care of	22.2	23.8	56.9	24.3	55.2	21	42.7	27.5	28.7	30.5
My income in the rural is sufficient	41.1	48.8	31.5	32.3	20	14.2	33.3	16.8	35.1	30.4
Migrants from rural are not doing well	16.7	25.1	6.6	35.9	32.8	5.2	12	7.6	17	18.4
I've emigrated before. It didn't happen	8.9	9.6	4.4	9.6	21.6	9.3	8.5	8.4	6.4	9.2
Other	14.4	6.9	5	11.4	3.2	6.8	12	1.5	3.8	7.1
I don't know where to go and how to get there	11.1	7.6	5.5	6.3	13.6	2.7	13.7	5.3	4.9	6.6
Health reasons	0	3	6.6	1.5	1.6	2.2	0.9	0.8	0.8	2.1
No reason	10	1	0	0.6	0	1.9	0	3.1	2.3	1.6

**Motivations behind the desire to migrate**

Among household heads who expressed a desire to leave their village or rural neighborhood, the most commonly cited reason was insufficient income, reported by 72% of respondents. This was followed by the lack of adequate land or livestock to maintain a livelihood in the village (53.3%). Additionally, 47.8% indicated the absence of social life in rural areas as a contributing factor, while 42.8% mentioned the need to migrate for educational purposes either for themselves or their children. Households, particularly prioritizing their subsistence needs, are migrating in order to meet their children's educational requirements and in hopes of a better future. This trend signifies a shift of young individuals away from agriculture. A study has indicated that as the education level of young people living in rural areas increases, the likelihood of remaining in agriculture may decrease by a factor of 0.09 (Ayyıldız et al., 2025). Furthermore, studies conducted in various countries have underscored that the highly educated young population tends to exhibit negative attitudes toward agriculture and views it as a last resort in career planning (Miller et al., 2011; Chinsinga and Chasukwa, 2012; Ojebiyi et al., 2015; Ridha and Wahyu, 2017). A further 40.3% stated that they were discouraged by the physically demanding and labor-intensive nature of farming and therefore preferred not to continue in the agricultural sector (Table 9).

**Table 9. Reasons of household heads who want to migrate (%)**

	Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
Insufficient income	75.0	86.0	68.0	69.7	82.5	75.3	62.5	58.8	45.7	72.0
I do not have enough land/animals for subsistence	75.0	69.8	64.0	60.6	75.0	50.0	50.0	35.3	25.7	53.3
We have no social life	0.0	46.5	56.0	42.4	52.5	51.7	50.0	38.2	37.1	47.8
For my children's education	50.0	41.9	36.0	51.5	50.0	42.1	62.5	47.1	25.7	42.8
Farming is hard and laborious	50.0	51.2	28.0	33.3	37.5	40.4	62.5	32.4	45.7	40.3
For an insured job	50.0	25.6	48.0	18.2	27.5	45.5	25.0	47.1	31.4	38.0
Spouse/children wanting to go to the city	25.0	51.2	56.0	6.1	55.0	24.7	75.0	20.6	37.1	32.8
Desire to find a job for myself and my children in the city	75.0	41.9	48.0	24.2	22.5	32.6	62.5	26.5	0.0	30.5
Insufficient working capital	0.0	25.6	36.0	33.3	67.5	26.4	37.5	14.7	14.3	29.5
Insufficient family labor force	0.0	41.9	36.0	27.3	40.0	25.3	25.0	26.5	5.7	27.5
Health problems	0.0	4.7	8.0	6.1	72.5	12.4	12.5	8.8	0.0	15.3
Expropriation. landslide. flooding etc. compulsory reasons	0.0	0.0	0.0	0.0	17.5	6.2	0.0	0.0	2.9	4.8
Other	25.0	25.6	0	15.2	7.5	3.9	12.5	23.5	20	10.8

**Previous migration from within the household**

As part of the survey, respondents were asked whether any member of their household had previously migrated (Table 10). The presence of individuals who have already migrated from a household is considered a significant factor that increases the likelihood of further migration, particularly among younger members. Migration by one family member often serves as a catalyst, facilitating or encouraging others to follow. The results indicate that in 42.8% of households across all regions, at least one person had previously migrated. This

suggests a notable pattern of chain migration within rural families, which can influence future demographic shifts and agricultural labor availability.

**Table 10.** Previous migration status within the household

		Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
None	N	71	181	155	193	83	332	64	91	202	1372
	%	71.7	50.7	70.5	51.2	50.3	59.1	49.6	50.3	65.6	57.2
There is	N	28	176	65	184	82	230	65	90	106	1026
	%	28.3	49.3	29.5	48.8	49.7	40.9	50.4	49.7	34.4	42.8
Total	N	99	357	220	377	165	562	129	181	308	2398
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

It can be asserted that with the increase in the number of migrants within households, the likelihood of young individuals considering migration has also risen. This situation is summarized in Table 11 across all regions. There are supporting studies for this finding. One such study indicates that as the number of migrants within a household increases, the probability of young individuals remaining in agriculture decreases by a factor of 0.052 (Ayyıldız et al., 2025). Additionally, another study conducted in Erzurum, Turkey, found a linear relationship between the increase in the number of relatives of migrating farmers and their own desire to migrate (Tasgin et al., 2016).

**Table 11.** Information on migrants from the household

		Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
N		30	254	194	312	225	374	97	144	190	1820
Ave. age		27	26	28	28	29	30	31	30	32	28
Gender %	M	63.3	59.1	50.5	49.4	68.9	57.5	48.5	49.3	52.1	55.4
	F	36.7	40.9	49.5	50.6	31.1	42.5	51.5	50.7	47.9	44.6
Ave. Migration (person)		0.30	0.71	0.88	0.83	1.36	0.67	0.75	0.80	0.62	0.76
Place of Migration		Ankara Kayseri İstanbul	Manisa İzmir İstanbul	Manisa İstanbul Tekirdağ	Antalya Mersin İstanbul	Bursa İstanbul Kocaeli	İstanbul Batman Ş. urfa	Zonguldak Germany İstanbul	İstanbul Ankara Adıyaman	Konya Kayseri İstanbul	Antalya İstanbul Konya
Reasons for Migration		Job, Mar, Edu	Job, Edu, Mar	Mar, Job, Edu	Mar, Edu, Job	Job, Mar	Job, Mar, Edu	Jop, Mar	Mar, Job, Edu	Job, Mar, Edu	Job, Edu, Mar

#### Demographic profile of migrants and returnees

Data on individuals who had migrated from the surveyed households reveal that the average age at the time of migration was 28 years, and 55.4% of those individuals were male. In a study conducted by Ayyıldız et al. (2025), a statistically significant relationship was found between the willingness of rural youth to remain in agriculture and their age. Specifically, when considering young individuals aged 15-29, it was estimated that with each one-year (unit) increase in age, the likelihood of rural youth remaining in agriculture could increase by a factor of 0.006. Although migration destinations varied across regions, İstanbul consistently appeared as a common destination. The primary motivation for migration was employment either to find a job or to pursue better work opportunities (Table 11). The proportion of individuals who migrated and later returned to their home villages was found to be 14% at the national level. Return rates were above average in the Central Eastern (20%), Mediterranean (19%), Central Northern (17%), and Aegean (17%) regions. Reasons for return included completing education, retirement, economic difficulties in urban areas, longing for rural life, and health-related concerns.

#### Continuity of agricultural enterprise

Household heads were also asked whether someone in their family would continue the agricultural activities after them. The responses show that in 72.5% of cases, household heads trust their children to take over and maintain the agricultural enterprises. However, 19.3% of respondents stated that no one would continue their agricultural work, either due to a lack of interest among children or the absence of a potential successor (Table 12). In rural areas, the head of the household (typically the father) holds the ownership of land and livestock as long as they are alive, thereby maintaining their power. On the other hand, the young individuals expected to sustain the business are often reluctant to take on responsibilities for an extended period due to a lack of their own assets or income, leading them to seek other employment or lifestyles (Ayyıldız et al., 2025). Surinam (2009) noted that young people are particularly unwilling to engage in agriculture due to a lack of access to productive assets, such as land, or a lack of control over those assets.

**Table 12.** The person who will continue the agricultural enterprises after the head of household

		Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
Children	N	67	278	168	316	74	427	68	127	213	1738
	%	67.7	77.9	76.4	83.8	44.8	76	52.7	70.2	69.2	72.5
Relative	N	3	4	0	23	22	18	1	2	23	96
	%	3	1.1	0	6.1	13.3	3.2	0.8	1.1	7.5	4
No one	N	29	68	43	38	54	63	56	49	64	464
	%	29.3	19	19.5	10.1	32.7	11.2	43.4	27.1	20.8	19.3
I have no farm	N	0	7	9	0	15	54	4	3	8	100
	%	0	2	4.1	0	9.1	9.6	3.1	1.7	2.6	4.2

Goran and Jelisavka (2017) emphasized that youth participation in the agricultural sector varies depending on their place of residence. Particularly among students in rural areas, agriculture is often perceived as a less valuable subject or a last resort. Conversely, urban youth generally view agriculture as a "difficult job" that they are unwilling to undertake (Chinsinga and Chasukwa, 2012). Arli et al. (2014) examined individuals aged 18-25 to understand their attitudes toward the agricultural sector and the factors influencing their willingness or unwillingness to engage in farming. Their study linked low agricultural income levels to the reluctance of youth to pursue farming, highlighting that education is a significant factor in enhancing respect for farmers within society and improving the quality of life for farmers. Furthermore, they emphasized the necessity of creating non-agricultural employment opportunities in rural areas.

**Projected fate of agricultural enterprises in the absence of a successor**

Household heads were asked what would happen to their agricultural enterprise if no one from the family continued farming after them. The most frequent response, given by 55.4% of respondents, was that the enterprise would be leased or entrusted to a sharecropper. In the Northeastern region, the highest proportion of household heads (40%) stated that the enterprise would be sold entirely. Meanwhile, the Southeastern region recorded the highest rate (40.9%) of responses indicating that the enterprise would simply be abandoned without any further use (Table 13).

**Table 13.** In case of no one continuing the agricultural enterprise in the coming years

		Central North	Aegean	Marmara and Thrace	Mediterranean	North East	South East	Black Sea	Middle East	Central South	General
Completely sold out	N	8	45	45	79	66	80	9	26	62	420
	%	8.1	12.6	20.5	21.0	40.0	14.2	7.0	14.4	20.1	17.5
Shared/rented out	N	73	224	146	226	48	252	75	113	171	1328
	%	73.7	62.7	66.4	59.9	29.1	44.8	58.1	62.4	55.5	55.4
It just stays like that	N	18	88	29	72	51	230	45	42	75	650
	%	18.2	24.6	13.2	19.1	30.9	40.9	34.9	23.2	24.4	27.1

**CONCLUSION**

This study involved face-to-face surveys with 224 village/neighborhood headmen and 2398 household heads across 224 rural settlements located in 27 provinces of Türkiye. The findings offer significant insights into rural migration dynamics and the future of agricultural production in the country. Results indicate that approximately 67% of the surveyed villages and neighborhoods are characterized as out-migration areas. This trend is particularly prominent in the Central Eastern (94.4%) and Central Northern (92.3%) regions, whereas the Mediterranean region (55.6%) has emerged as a net in-migration area. Most migrants are in their twenties, and 53.1% relocate to district or provincial centers. The highest return migration rates were observed in the Mediterranean region, largely driven by emotional ties and financial difficulties encountered in urban areas.

Despite widespread rural out-migration, 79.7% of household heads reported no intention to leave their current settlements. Among those who do wish to migrate, economic challenges particularly insufficient income (72%) and lack of sufficient land or livestock (53.3%) are the primary motivating factors. Social isolation, educational needs, and the physical demands of agriculture are also significant contributors.

Approximately 42.8% of households have experienced at least one prior migration, with an average migrant age of 28 and 55.4% being male. Regardless of regional variation, Istanbul consistently appeared as a migration destination, with employment being the predominant reason. Return migration was recorded at 14% nationwide, with the highest rates in the Central Eastern, Mediterranean, Central Northern, and Aegean regions. Common reasons for returning included the completion of education, retirement, economic hardship, longing for rural life, and health concerns.

In terms of agricultural continuity, 72.5% of household heads expressed confidence that their children would continue farming activities. However, 19.3% indicated that no one would take over the enterprise. If agricultural production were to cease, 55.4% of respondents stated the enterprise would be leased or shared, 40% in the Northeastern region would opt to sell, and 40.9% in the Southeastern region would leave the land idle. These findings underscore critical challenges and transformations within rural Türkiye. While a significant proportion of middle-aged rural residents express a desire to remain, the out-migration of youth signals a generational shift that may threaten the future sustainability of agriculture. Although many parents believe their children will continue farming, the broader trends suggest otherwise.

Historical issues such as fragmented land ownership due to inheritance laws and high rural population growth have resulted in scattered and inefficient land distribution. Many rural migrants retain ownership of their land, leading to excessive parcelization and reduced agricultural productivity. As a result, many agricultural plots are currently fallow, neglected, or abandoned, and related infrastructure has deteriorated. In the long term, the continued out-migration from rural areas poses significant operational and structural challenges for the agricultural sector. The aging farming population and the reluctance of younger generations to engage in agriculture limit the sector's capacity to adopt modern practices. Farmers increasingly avoid making medium- or long-term decisions and, in some cases, abandon agriculture entirely.

To ensure the sustainability of rural life and agricultural production, migration should not be treated solely as a necessity but as a choice. This requires policies that go beyond enhancing household income; they must focus on improving local opportunities and integrating them into regional development strategies. Urban centers attract migrants not only with employment but also with better access to healthcare and education. Therefore, enhancing job opportunities and expanding social security coverage in rural areas while supporting rural employers could contribute to resolving existing issues and reducing migration pressure.

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#### **Conflict of Interest**

The authors declare no conflict of interest.

#### **Ethics Statement**

The research protocol was approved by the Social and Human Sciences Ethics Committee of Ondokuz Mayıs University under decision no. 310, dated 20.11.2018.

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## REFERENCES

- Anonymous, (2018). Food and Agriculture Organization of the United Nations (FAO). Turkey country profile. <http://www.fao.org/ag/AGP/AGPC/doc/counprof/turkey.htm> (Accessed date: 10.03.2018)
- Anonymous, (2019). Turkish Statistical Institute (TURKSTAT). Migration Statistics. <http://tuikapp.tuik.gov.tr/adnksdagitapp/adnks.zul?kod=4> (Accessed date: 01.02.2019)
- Arlı, R., Balcı, M. & Abay, C. (2014). Gençlerin Kırsalda Çiftçilik Yapma Eğilimleri: Akhisar İlçesi Örneği. Ulusal Aile Çiftçiliği Sempozyumu Bildirileri, Ankara, Türkiye.
- Aroca, P. & Hewings, GJ. (2022). Migration and regional labor market adjustment: Chile 1977–1982 and 1987–1992. *The Annals of Regional Science*. 36. 197–218. <https://doi.org/10.1007/s001680200078>
- Aşkın, EÖ., Yayar, R. & Oktay, Z. (2013). Kırsal göçün ekonometrik analizi: Yeşilyurt ilçesi örneği. *Cumhuriyet Üniversitesi İktisadi ve İdari Bilimler Dergisi*. 14(2). 231-252.
- Ayyıldız, B., Erdal, G., Çiçek, A. & Ayyıldız, M. (2025). Factors Influencing Rural Youth's Tendency to Stay in Agriculture in Türkiye. *Sustainability*, 17(8), 3313. <https://doi.org/10.3390/su17083313>
- Butzer, R., Larson, DF. & Mundlak, Y. (2002). Intersectoral migration in Venezuela. *Economic Development and Cultural Change*. 50. 227-248. <https://doi.org/10.1086/322876>
- Bostan, H. (2017). Türkiye'de iç göçlerin toplumsal yapıda neden olduğu değişimler. meydana getirdiği sorunlar ve çözüm önerileri. *Coğrafya Dergisi*. 35. 1-16. <https://doi.org/10.26650/JGEOG330955>
- Çatalbaş Karpaz, G. & Yayar, Ö. (2015). Türkiye'deki bölgeler arası iç göçü etkileyen faktörlerin panel veri analizi ile belirlenmesi. *Alphanumeric Journal*. 3. 99-117.
- Çınar, S. & Lordoğlu, K. (2011). Mevsimlik tarım işçileri: Marabadan ücretli fındık işçiliğine. In III. Sosyal Haklar Uluslararası Sempozyumu Bildiri Kitabı (pp. 419–448). Petrol-İş Yayını.
- Çiçek, A. & Erkan, O. (1996). Tarım ekonomisinde araştırma ve örnekleme yöntemleri (Ders Notları Serisi No:6). Tokat: Gaziosmanpaşa Üniversitesi Ziraat Fakültesi Yayınları.
- Chinsinga, B. & Chasukwa, M. (2012). Youth, agriculture and land grabs in Malawi. *IDS Bull.*, 43. 67–77.
- Devillanova, C. & Garcia-Fontes, W. (2004). Migration across Spanish provinces: Evidence from the social security records (1978-1992). *Investigaciones Económicas*. 28. 461-487.
- Ederveen, S., Nahuis, R. & Parikh, A. (2007). Labour mobility and regional disparities: The role of female labour participation. *Journal of Population Economics*. 20. 895–913. <https://doi.org/10.1007/s00148-006-0095-6>
- Gawande, K., Bohara, AK., Berrens, RP. & Wang, P. (2000). Internal migration and the environmental Kuznets curve for US hazardous waste sites. *Ecological Economics*. 33. 151–166. [https://doi.org/10.1016/S0921-8009\(99\)00132-9](https://doi.org/10.1016/S0921-8009(99)00132-9)
- Goran, R. & Jelisavka, B. (2017). Some aspects rural-urban interdependence: economic-geographical view. *Russian Journal of Agricultural and Socio-Economic Sciences*, 61. 17-28.
- Güreşçi, E. & Yurttaş, Z. (2008). Kırsal Göçün Nedenleri ve Tarıma Etkileri Üzerine Bir Araştırma: Erzurum, İspir, Kırık İlçesi Örneği. *Tarım Ekonomisi Dergisi*. 14. 47–54.
- Huarez, JP. (2000). Analysis of interregional labor migration in Spain using GrossFlows. *Journal of Regional Science*. 40. 377-399. <https://doi.org/10.1111/0022-4146.00179>
- İçduygu, A., Sirkeci, İ. & Aydingün, İ. (1998). Türkiye'de içgöç ve içgöçün işçi hareketine etkisi. In A. İçduygu (Ed.). *Türkiye'de içgöç* (pp. 207–244). Türkiye Ekonomik ve Toplumsal Tarih Vakfı.
- Karabulut, K. & Polat, D. (2007). Türkiye'de yaşanan göç olgusu üzerine bir alt bölge uygulaması. İnönü Üniversitesi.

- Lordođlu, K. (2006). Türkiye işgücü piyasaları. durum raporu (Yayın No: 56). İstanbul: Mart Matbaacılık.
- Miguel. E., Gertler. P. & Levine. DI. (2006). Does industrialization build or destroy social networks? *Economic Development and Cultural Change*. 54. 287-317. <https://doi.org/10.1086/497014>
- Miller, D., Allen, W. & Kleinschmidt, C. (2011). Career motivations and attitudes towards agriculture of first-year science students at The University of Queensland. *Agricultural Science*. 23. 18–28.
- Mueller, V., Doss, C. & Quisumbing. A. (2018). Youth migration and labour constraints in African agrarian households. *The Journal of Development Studies*. 54. 875-894. DOI: 10.1080/00220388.2018.1432328.
- Official Gazette. (2010). Amendment to the family medicine practice regulation. Issue (27591).
- Official Gazette. (2014). Ministry of National Education Regulation on access to education through transportation. Issue (26116).
- Oğuz, C., Ergun, H., Kan, M., Kan, A., Demiröz, E. & Küçükçongar, M. (2016). The Poverty Phenomenon and Its Effect on Migration in Agriculture: Case Study of Konya. *Recent Researches in Interdisciplinary Sciences, Sofia/Bulgaristan* : St. Kliment Ohridski University Press, p:29-52, ISBN: 978-954-07-4141-3
- Ojebiyi, WG., Ashimolowo. OR., Soetan. OS., Aromiwura. OA. & Adeoye. AS. (2015). Willingness to venture into agriculture-related enterprises after graduation among final year agriculture students of Federal University of Agriculture, Abeokuta. *International Journal of Applied Agriculture and Apiculture Research*, 11. 103-114.
- Pazarlıođlu, V. (2007). İzmir örneğinde iç göçün ekonometrik analizi. *Yönetim ve Ekonomi Dergisi*. 14. 121-135.
- Ridha, RN. & Wahyu, BP. (2017). Entrepreneurship intention in agricultural sector of young generation in Indonesia. *Asia pacific journal of innovation and entrepreneurship*, 11. 76-89.
- Shrestha, NR., Velu, RP. & Convey, D. (1993). Frontier migration and upward mobility: The case of Nepal. *Economic Development and Cultural Change*. 41. 787-816.
- Suriname, V L. (2009). Youth in agriculture-challenges and opportunities. In Unpublished report presented at the thirtieth regular meeting of the conference of heads of government of the Caribbean community (pp. 2-5).
- Taşgın, G., Kadiođlu, S., Gezenođlu, CK. & Kadiođlu, B. (2016). Kırsal Göçü Etkileyen Faktörlerin Analizi: Erzurum İli Örneđi. XII Ulusal Tarım Ekonomisi Kongresi Bildirileri Kitabı, Isparta, Türkiye. 25–27 Mayıs 2016.
- Yakar, M. & Yazıcı, H. (2009). Emirdağ ilçesinde göçlerin tarım alanlarına etkileri. *Coğrafi Bilimler Dergisi*. 7. 163-176.
- Yakar, M. (2012). İç ve dış göçün kırsal nüfusun yaş yapısı üzerindeki etkileri: Emirdağ ilçesi üzerine bir vaka çalışması. *Türkiye Coğrafya Dergisi*. 10. 129–150.
- Yavuz, F., Aksoy. A., Topçu, Y. & Erem, T. (2004). Kuzeydođu Anadolu Bölgesinde kırsal alandan göç etme eğilimini etkileyen faktörlerin analizi. *Gaziosmanpaşa Üniversitesi*. 139-144.
- Zırhlıođlu, G. (2010). İç göçün Van'ın tarımı üzerindeki etkileri. *Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi*. 20. 144-152.