

The Significance of Animal Husbandry in Agricultural Output and Exportation within Gaziantep Province

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Abstract

The present study investigates the importance of animal husbandry in agricultural activities and exportation in Gaziantep province. For this purpose, the data obtained from the following institutions was subjected to evaluation: Presidency of the Republic of Türkiye Strategy and Budget Directorate, Turkish Statistical Institute, Ministry of Agriculture and Forestry, Provincial Organisations, and Gaziantep Chamber of Commerce and Industry. The study revealed that the Gaziantep province has 17.727 agricultural enterprises. Furthermore, it was determined that 1.56% of ovine animals and 1.18% of bovine animals in Türkiye are raised in Gaziantep province. In the context of Türkiye's total exports, it is noteworthy that the Gaziantep province plays a significant role in the live animal trade, with a percentage of 10.91%, followed by meat and offal exports, accounting for 0.94%. The province also stands out in the export of dairy and egg products, contributing 2.05%, as well as animal and vegetable fats, with a notable 19.71% share. The share of animal products in agricultural exports made on a provincial basis was calculated as 11% in live animal exports, 15% in feed and additives, 5% in poultry meat and products, and 47% in eggs. In conclusion, animal husbandry plays a pivotal role in enhancing agricultural productivity and contributes significantly to the export potential of Gaziantep province, underscoring its importance in both local economic development and national agricultural strategies.

Introduction

The distribution of income and welfare levels across different countries worldwide is influenced by a variety of geographical, economic and labour force factors. It is important to note that agricultural earnings are subject to variation depending on the climatic, topographical and soil structural characteristics of the region. The evaluation of development in a nation-state in a single direction will result in an incomplete definition of the role of other sectors in economic development. However, when economic development is analysed in many aspects, the role and importance of agriculture will be better understood. Economic development is a dynamic structure in the international dimension and is a

holistic formation that includes service, industry, agriculture and industry sectors.

An examination of the economic development process of countries readily reveals that income derived from agriculture is often utilised as a source of capital in the industrial and commercial sectors. Türkiye, with its diverse geography and substantial agricultural product market, is among the countries with strong economies and is frequently mentioned in international markets. The country's rich geographical characteristics and the resulting agricultural genetic diversity provide a significant advantage in contributing to regional economic development (Arzik *et al.*, 2023; Kizilaslan *et al.*, 2024). The presence of different climate types and

ecological conditions allows for the cultivation of diverse crop patterns and the expansion of livestock activities (Ertan *et al.*, 2025); this, in turn, diversifies income sources for the local population and supports the balanced and sustainable growth of the national economy (Arzik *et al.*, 2025). In the contemporary era, the challenges associated with meeting the nutritional requirements of individuals through agricultural products, as well as the difficulties encountered during the procurement process, underscore the strategic importance of this sector. From this standpoint, it is imperative to ascertain the characteristics of a province, including its geographical situation, soil structure, climatic data, and the diversity and quantity of agricultural products produced.

Gaziantep, which is known as the Upper Mesopotamian Plain in history and is part of the Fertile Crescent, is one of the provinces with the highest potential to become a leader in agricultural production in Türkiye. The province has achieved renowned for its industrial prowess and contributes substantially to the national economy through agricultural production. As is well documented, Pistachio, almond, walnut, grape, red lentil, chickpea, cotton, sesame, wheat, garlic, olive and fig cultivation is widespread in Gaziantep, in addition to livestock breeding activities. The production branches in question include the textile, metal, machinery, chemical, plastic, food, footwear, leather, wood products and furniture sectors (Anonymous, 2019; Yanar and Savrun, 2023; Ağazade, 2023). The economic contribution of livestock production in Gaziantep extends beyond primary production, encompassing a wide range of sectors such as feed manufacturing, veterinary services, processing industries, and logistics, thereby promoting employment across multiple domains. Animal products are increasingly becoming a significant part of the province's export portfolio, particularly through value-added exports of processed meat, dairy products, and traditional items such as sausages and cheese. This economic diversification aligns with national agricultural policies aimed at strengthening rural economies and enhancing international competitiveness. Nevertheless, the livestock sector in Gaziantep faces several challenges, including limited feed resources, climate variability, inadequate pasture management, and market fluctuations. Addressing these issues requires the integration of traditional knowledge with modern practices, sustainable management of natural resources, and the development of supportive policy frameworks. In this context, a comprehensive analysis of the province's unique livestock dynamics is crucial for designing targeted interventions that can enhance both productivity and long-term sustainability.

The present study was conducted for the purpose of analysing the economic contribution of animal husbandry to the agricultural sector in Gaziantep

province. In addition, it was investigated how income and employment opportunities are created by animal husbandry activities. Finally, the effects on the local, regional and national economy were evaluated.

Material and Method

The material of the study consists of the economic data obtained from Gaziantep province and the share of animal husbandry in these data. The geographical location of the province in question is such that it is situated along the historical Silk Road, which was a major commercial and cultural route between the Southeast and the Mediterranean regions. Gaziantep, constituting approximately 1% of Türkiye's territory, is also bordered by the provinces of Kahramanmaraş, Adıyaman, Şanlıurfa, Osmaniye, Hatay and Kilis (Anonymous, 2016).

In this study, data obtained from institutions and organisations operating in different fields in our country were analysed. In this context, data from the Presidency of the Republic of Türkiye Strategy and Budget Directorate, the Turkish Statistical Institute, the Ministry of Agriculture and Forestry and its Provincial Organisations, and the Gaziantep Chamber of Commerce and Industry were subjected to evaluation. Furthermore, the information has been expanded upon in several academic studies.

Results and Discussion

The Place and Importance of the Agricultural Sector in the Turkish Economy

While the share of agriculture in the Gross National Product was approximately 40 % in the early years of the Republic, it reached approximately 47 % in 1929 (Karluk, 2007). The agricultural sector, a dominant economic force throughout the country, experienced a significant shift in its share. In the 1980s, the sector's contribution to the economy stood at 25.8%, a figure that declined to 5.54% in 2021. However, the sector witnessed a recovery, with its share increasing to 6.5% in 2022. The agricultural sector has been experiencing a gradual decline in its overall strength and this ratio in GNP was determined as 4.4% in the second quarter of 2023. The employment rate was determined as 15.8% (about 4.9 million people) among all sectors (about 30.8 million people) (Anonymous, 2023a).

The total arable land in Türkiye is 38.482.000 hectares, of which 20.194.000 hectares were under production as of 2022 (Anonymous, 2023a). A total area of 16.510.000 hectares is dedicated to cereal and other vegetable production, 718.000 hectares are allocated for vegetable production, 6,000 hectares are designated for ornamental plant production, and 2.960.000 hectares of land remains fallow. Concurrently, 14.617.000 ha of land is utilised for

meadow pasture, while 23.110.000 ha is designated for forestry.

Furthermore, sectoral-based GDP amounts are enumerated in Table 1. As demonstrated in the table 1, there has been a substantial increase of 141.28% in the agricultural sector between 2021 and 2022, contingent on the implementation of production and price policies across all sectors.

In comparison to other sectors, the agricultural sector in 2022 accounted for 23.86 % of the income from industry and 11.53 % of the service sector (excluding taxes and subsidies). Agricultural products of Turkish provenance are exported to numerous regions

across the globe. According to data from the Turkish Statistical Institute, the agricultural sector constituted 701 million USD (3.99%) of the total exports of 17.554 billion USD in 2022 (Anonymous, 2023a).

In the statement made by the International Trade Centre, the share of agriculture in total exports in the world at the end of 2022 was 2.021 trillion dollars, accounting for 7.94% of total exports. The rate was documented as 7.35% in 2003 and 9.87% in 2020. Türkiye's agricultural products export value was reported as 3.7 billion dollars in 2002, 15.2 billion dollars in 2012, and 20.7 billion dollars in 2020. With a total agricultural product export volume of 29.9 billion

Table 1. GDP amounts by sector over the years, Thousand TL (Anonymous, 2023b).

Sectors	2021	2022	2023
Agriculture, forestry and fishing	401.536,982	972.301,593	1.624.740,882
Industry	1.891.987,439	3.964.834,337	5.959.554,257
Manufacturing industry	1.613.624,455	3.318.900,769	5.099.529,147
Non-manufacturing industry	278.362,984	645.933,568	860.025,110
Services	4.195.020,291	8.499.650,864	15.668.237,817
Construction	367.052,709	732.915,929	1.466.467,835
Trade, transport and accommodation	1.773.981,389	4.010.484,772	7.009.908,056
Information and communication	202.927,171	355.572,981	643.801,086
Financial and insurance activities	211.257,040	494.575,554	867.450,349
Real estate activities	358.675,898	556.821,344	1.018.322,943
Professional, administrative and support service activities	342.342,371	685.846,287	1.349.518,484
Public administration, education, human health and social work activities	771.799,917	1.360.100,775	2.732.208,111
Other service activities	166.983,795	303.333,221	580.560,952
Total sectors (1+2+3)	6.488.544,712	13.436.786,794	23.252.532,956
Taxes-subsidies	767.597,025	1.574.989,184	3.023.774,417
GDP at purchasers' prices (4+5)	7.256.141,737	15.011.775,979	26.276.307,373

dollars, Türkiye ranked 21st among the world countries in 2022. Among the agricultural products exported worldwide, 8% of meat and meat products are supplied from our country. While Germany ranked first among agricultural export countries in 2008, Iraq rose to first place in 2011. As of the close of 2022, Iraq has the highest ranking with a 17% share of 5.2 billion USD, followed by Russia with a 7% share of 2.1 billion USD, the USA with a 6.3% share of 1.9 billion USD, Germany with a 6% share of 1.8 billion USD, Syria with a 3.3% share of 1 billion USD, and 22% of agricultural products exports to EU countries.

An examination of the composition of export products (Figure 1) reveals that in 2022, the top three exports were cereals and pulses (44.5%), aquaculture products and animal products (15.8%), and fresh fruits and vegetables (11.4%) (Anonymous, 2023a: 2023c). Erhalim *et al.* (2011) and Demir *et al.* (2023)

emphasized in their studies that agriculture plays a vital role in the national economy, and they highlighted substantial fluctuations in its contribution to the GDP over the years.

Türkiye's total imports in 2022 were \$364.4 billion, of which 6.4% (\$23.2 billion) were agricultural products. \$5.7 billion (25%) of these imports were realized under the inward processing regime. These imported products were leaf tobacco (\$149 million), palm oil (\$249 million), corn (\$210 million), red lentils (\$413 million), crude sunflower oil (\$948 million) and bread wheat (\$2 billion), respectively. When analysing the importation of agricultural products according to chapters, it was found that 4.6% of the total consisted of fruits and vegetables, 10.6% comprised animal feeds meal and bran, 14.2% constituted oilseeds, 17.7% consisted of animal and vegetable oils, and 23.1% were cereals (Anonymous, 2023a: 2023c). Aksoylu and

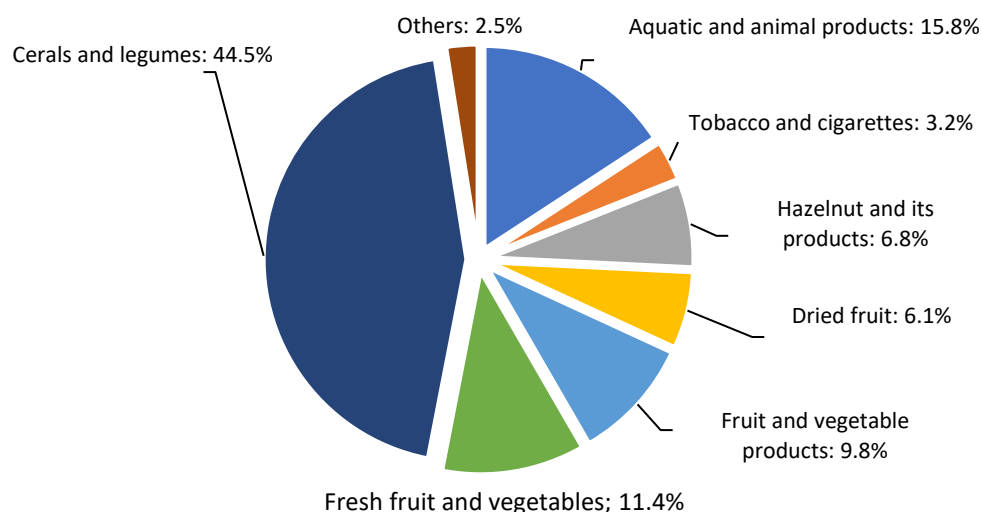


Figure 1: Export rates by product (for 2022; Anonymous, 2023a).

Karaalp Orhan (2022) and İstikbal (2022) examined the year-by-year fluctuations in Türkiye's agricultural export and import shares, underscoring the critical importance of agriculture's contribution to the overall national income.

Demographic Structure of Gaziantep Province

The population of Gaziantep, which has a total surface area of 6887 km², is 2.164.134 of which 1.091.830 (50.45%) are male and 1.072.304 (49.55%) are female, with an average age of 26.6. The annual population increase compared to the previous year was calculated as 4.7%. The city of Gaziantep has a population of 560.349 households. The ratio of people forming a household was determined as 3.8. Gaziantep is administratively divided into a total of nine districts, of which two are considered central and the remaining seven are districts affiliated to the

centre (Anonymous, 2023a). The central districts of Gaziantep province are Şahinbey and Şehitkamil. The central districts constitute 83.48% of the total provincial population. This phenomenon is further compounded by the province's status as an industrial city and the ongoing migration from rural areas to urban centres. Consequently, the young population is increasingly migrating from rural to urban areas, thereby disincentivising engagement in agricultural activities. The recent trend of converting agricultural and pasture lands into urban construction sites, the escalating costs of inputs, and the challenges in selling agricultural produce at optimal prices have been identified as the primary factors driving rural-to-urban migration.

As illustrated in Table 2, the educational attainment of the Gaziantep province population is shown according to gender. As demonstrated in the chart, the number of illiterate women in our province is significantly higher than that of men.

Table 2. Educational attainment in Gaziantep province (Anonymous, 2023c).

Education level (age 7+)	Male	Female	Total
Illiterate	6.121	44.978	51.099
Literate	111.315	135.228	246.543
Primary school graduate	280.049	310.108	590.157
Middle school graduate	225.278	185.388	410.566
High school graduate	198.064	146.150	344.214
Associate and bachelor's degree	160.670	98.281	209.101
Postgraduate degree	11.001	11.410	27.477
Total	992.498	931.543	1.879.157

Recent studies have indicated that the proportion of high school graduates is higher among males than among females. It has been observed that there may be minor discrepancies between males and females regarding individuals in possession of associate and bachelor's degrees (Erhalim, 2011; Semerci, 2018; Kuzu, 2022).

Employment in Gaziantep Province

According to the 2022 data of the Turkish Statistical Institute, the population of Gaziantep province was determined to be 2.154.051 people. The labour force participation rate in our province was reported as 49.7%, the employment rate as 44.4% and the unemployment rate as 10.7%. When the distribution of the labour force by sector is examined, it is reported that 51.2% of individuals work in the service sector, 33.6% in the industry sector and 15.2% in the agriculture sector. The GDP per capita in Gaziantep province was calculated as 70.228 TL (Sarışık ve ark., 2023).

Land Assets in Gaziantep Province

Gaziantep province has 6,807,419 da of land, including forest, agricultural, pasture and non-agricultural land. Of this land, 51% is agricultural land, 17% is forest, 8% is pasture and 24% is non-agricultural land. Within the usable agricultural land in Gaziantep, 135,409 da are used for vegetable cultivation, 2.189.908 da for fruit cultivation, 1,126,982 da for arable farming and 15,803 da for other agricultural activities. Pistachios, olives, vines, grapes and other agricultural products account for 65%, 21%, 8%, 8% and 6% respectively of the fruit-growing area. Wheat (57%), barley (20%), chickpeas (8%), other crops (15%), red peppers (36%), garlic (26%), mint (7%) and other crops (31%) are cultivated as vegetables. While 1,517,340 ha of agricultural land is available for irrigation in Gaziantep, only 688,950 ha of this area is currently irrigated. The main reason for this is the high cost of irrigation and energy. While the proportion of irrigable land in Türkiye is 24 per cent, this is below the national average (20 per cent). In Gaziantep province, the transition from field to crop agriculture has increased significantly in recent years, and the cultivation of strategic crops such as wheat, barley, lentils and chickpeas has decreased significantly. In this context, fruit production increased from 41% in 2004 to 63% in 2002 (Anonymous, 2023d).

Crop Production in Gaziantep Province

Gaziantep province comprises 25% of the Southeastern Anatolia Project (GAP) (Anonymous, 2023e). This fertile, high quality and productive land,

irrigated by the Euphrates River, is home to many crop production activities. In this province, there are 38.625 enterprises engaged in crop production. Gaziantep province, an important agricultural centre, is the leading producer of garlic in Türkiye, a title it has held since 2019. Gaziantep was responsible for 33% of the country's garlic production in 2022. Gaziantep has been identified as a leading producer of mints, with a significant proportion of Türkiye's mint production (72%) taking place in this city. In the context of pistachio production, which derives its name from the province, Gaziantep attained second position in Türkiye, accounting for 23% of the total production in 2022. In 2022, a total of 273.846 tonnes of red pepper were produced in our country, with 79,993 tonnes (29.21%) being produced in Gaziantep province. Our province ranked second in terms of production. In 2022, the province contributed 150.677 tonnes of the total 4.165.000 tonnes of fresh grape production across the country, thereby ranking eighth. Gaziantep is positioned 9th in Türkiye in terms of red lentil production, 12th in chickpea production, 13th in olive production, 29th in wheat production and 45th in barley production (Anonymous, 2023d).

Animal Production in Gaziantep Province

The number of livestock enterprises in Gaziantep province decreased in 2023 compared to the previous year. While this number was 19.658 in 2022, it decreased to 17.727 in 2023. In this area, the number of aquaculture enterprises remained constant in both years and was determined as 22 units. In our country, 821.853 heads (1.56%) of the total 52.363.410 heads of small ruminants and 196.534 heads (1.18%) of the total 16.583.005 heads of bovine animals are raised in our province. When we detail our animal existence based on species, there are 97.438 heads of culture, 94.360 heads of culture hybrid, 4.186 heads of domestic cattle and 280 heads of buffalo in terms of cattle in our province. As for small ruminants, there are 3.190 heads of Merino sheep, 587.352 heads of Awassi sheep and their hybrids, and 231.311 heads of Hair goats as goats. In Gaziantep province, the projects named Public Hand Breeding of Kilis Goat I and II" and "Public Hand Breeding of Awassi Sheep I and II" supported by the Ministry of Agriculture and Forestry have been successfully carried out since 2011 (Anonymous, 2023e). Bee breeding is carried out in 315 villages in our province, and it has been reported that the number of new hives is 24.054, the number of old type hives is 5.784, a total of 29.838 hives, 209 tonnes of honey production, 3 tonnes of beeswax production (Burucu, 2022). When honey production in our province is compared to the total amount of honey produced in the country, it is seen that it has a share of 0.18% (Anonymous, 2023d).

Exports of Agricultural Products in Gaziantep

Gaziantep, which is the gateway of the historical Silk Road to Anatolia, is a city that has made a name for itself in every field with its commercial ability and productivity and has made serious contributions to the national economy. Since the establishment of the Republic, it has made significant investments and built facilities in the field of industry. Türkiye was divided into 11 industrial zones and 7 provinces (Bitlis, Diyarbakır, Elazığ, Malatya, Siirt, Şanlıurfa and Mardin) were connected to Gaziantep province in 1925. Of the 2008 small industrial facilities in our city in 1927, 55% were based on agriculture, 21% on weaving, 10% on wood products and metal goods. Today, it has the largest organised industry in Türkiye with approximately 4500 hectares of land (Anonymous, 2021). The products manufactured in both small industrial sites and organised industrial zones are sold both domestically and internationally in Gaziantep. In this province, which is predominantly agricultural, the export values of animal products are outlined in Table 3.

As illustrated in the accompanying table, the quantity of income derived from livestock sales and related products varies across different years within the province. As indicated by the data, the export of live animals has been identified as a priority area for consideration. However, a significant decrease was observed in 2023 compared to previous years. This decline is concomitant with the number of live animals in our country. Despite the decline in the quantity of live animals, there has been a substantial increase in the exportation of carcass meat and offal.

A decline in sales has been observed in dairy products, animal fat, eggs, honey, silk, leather and products derived from animals. In the context of the present study, an evaluation of the year 2023 reveals that it was a suboptimal year regarding provincial exports. A comparison of the year 2023 with previous years reveals that it is a suboptimal period regarding the provincial economy. This phenomenon may be associated with the global economic crisis and the challenges faced in the agricultural sector, particularly within our nation. An analysis of the export values derived from animal husbandry activities reveals that, in 2023, the products exported in this sector in Türkiye and the total sales obtained in our province hold significant importance in our country, which is comprised of 81 provinces and accounts for a 7.22% share. Once more, when proportioned to the aggregate provincial agricultural product export values, it was ascertained that a considerable income was obtained, with a percentage share of 28.84%, according to the same year data (Anonymous, 2023g).

Table 4 shows the plant-based export products exported from our province. It is seen that the most remarkable items among these products are cereals and milling products. Especially the export of processed products such as flour and starch has a large share in total sales. Mundan *et al.* (2017), in their study conducted in the Southeastern Anatolia Region, and Semerci (2018), in research carried out in the province of Hatay, highlighted the significance of livestock production within the overall agricultural sector. Their findings indicate that the share of animal husbandry in total agricultural output is substantial and cannot be overlooked.

Table 3. Animal-Origin products exported from Gaziantep (Thousand USD) (Anonymous, 2023f).

Export Items	2021	2022	2023
Live animals	16.660,924	18.800,138	7.057,734
Meat and offal	4.477,137	5.760,540	7.937,754
Dairy products, eggs, honey, other edible animal products	42.780,747	46.854,059	38.712,517
Other animal products (bones, horns, intestines, etc.)	2.721,443	2.268,068	2.058,448
Animal and vegetable fats and oils	625.956,842	769.756,200	633.750,700
Fishery products	4.029,655	7.243,930	5.215,616
Raw hides and skins (except fur) and leather	234,042	64,851	31,518
Leather products (bags, home and decorative items, etc.)	955,504	1.501,960	1.948,605
Silk	23,542	83,038	48,997
Wool, hair, horsehair yarn and woven fabrics	5.218,817	3.788,418	4.630,580
Total	703.058,653	856.121,202	701.392,469
Animal-origin exports from Türkiye	4.974.340,476	7.028.679,693	7.174.952,001
Ratio to plant-origin exports (%)	33.80	35.24	28.84
Share in total exports (%)	7.17	8.41	7.22

Table 4. Plant-Origin products exported from Gaziantep (Thousand USD) (Anonymous, 2023f).

Export Items	2021	2022	2023
Edible vegetables and certain roots and tubers	20.854,495	17.936,142	16.376,109
Edible fruits and nuts	101.891,842	90.314.234	65.442,108
Coffee, tea, maté and spices	7.486,232	8.107.308	8.935,456
Cereals	15.237,723	8.825,217	462.101,966
Milling products	321.597,740	362.970,534	362.300,526
Oil seeds and oleaginous fruits	79.971,3	100.271,366	57.900,297
Vegetable plaiting materials	282,603	1.020,868	1.535,516
Cereal, flour, starch or milk preparations; pastry products	880.524,162	1.102.161,034	1.077.270,987
Preparations of vegetables and fruits	259.797,167	393.539,629	218.052,854
Miscellaneous edible preparations	101.624,139	118.541,710	13.648,688
Cotton, cotton yarn and cotton fabrics	277.401,566	213.731,351	137.811,166
Other vegetable textile fibres, paper yarn and fabrics	13.619,166	11.829,460	10.385,313
Total	2.080.508,675	2.429.254,588	2.431.812,996
Plant-origin exports from Türkiye	18.077.985,210	19.880.114,210	21.729.953,611
Ratio to animal-origin exports (%)	295.89	283.75	346.70
Share in total exports (%)	21.23	23.86	25.03

It is seen that fresh fruits and vegetables, which are other remarkable products, are exported from our province and foreign currency inflow to our country. Again, it is seen that significant revenues are obtained in the export of cotton and products obtained from cotton in our province, which has an important production in our province and where the important textile industry of our country is located. In the export of some chapters of plant products, it is seen that a similar situation occurred in the export of animal products in terms of export values in 2023. Although the monetary value is close to the previous year, it has increased from 23.86% to 25.03% in total export share. When a general evaluation on the export values of Gaziantep province is made, our province is an important centre in terms of organised industrial zone and is the largest industrial zone in Türkiye. In particular, the fact that many leading textile companies with high brand value and important food factories operate in this region explains why the export data are high (Anonymous, 2023f).

Agricultural products exported from Türkiye and their monetary values are given in Table 5. In this table, animal and vegetable fats and oils are the most prominent export item among animal chapters. It is not clear what is the most exported product within this chapter, since official statistical data give this item. Considering that Türkiye is a sunflower, cotton and olive paradise, this situation can be easily explained. Other attractive products in the same group are meat, offal, milk, eggs, honey and other products of animal origin. Raw leather and its products are also among the products with a significant share in exports. When we look at the share of animal products in total agricultural

exports, it is seen that it is 23.03% in 2023, although it has been changing over the years. This value can be considered as a very serious economic indicator of how much importance should be given to this chapter only in terms of animal products. It is seen that the most striking item among the plant chapters is fruit and nutshell products. It is reported that cereals, vegetables, milling products, cotton and cotton products are among the most export items. The fact that the textile industry is developed in our country explains the exports of cotton and cotton products, and the fact that the food industry is developed explains the exports of other foodstuffs. The share of agricultural exports in the total exports of our country is calculated as 11.26 per cent in 2023 with an increase compared to previous years (Anonymous, 2023f).

The values of the share of exports of agricultural products produced in Gaziantep province in Türkiye's total exports are given in Table 6. When analyse the table, the most striking export product among animal products is animal and vegetable oils. This is followed by fleece and its products, milk, oil, honey and foods of animal origin. When we consider the export products of vegetable origin, it is seen that the most exported products are cereal products and milling products. As mentioned above, the food factories in our province are known as important trade centres at national and international level. This item is among the most exported products in the export of agricultural products of our country. Again, this situation is explained by the fact that our province stands out in animal husbandry activities and the industrial establishments it has within it. In addition to all this information, according to the data of Gaziantep Provincial Directorate of Agriculture

and Forestry, in 2023, 157.244.060 eggs were exported to Syria, United Arab Emirates, Qatar, Gambia, Liberia, Somalia and Taiwan; 2.738,111 kg of chicken meat and products were exported to Iraq, Libya, Canada, Somalia and Mauritius; 1.218.012 kg of milk and dairy products, 6.996 kg of honey and beekeeping products to the United Kingdom and Cape Verde, 575.806 kg of fishery and aquaculture products to Iraq, 120 breeding sheep and goats to Azerbaijan, 1.798.780 poultry (chicks) to Syria and Georgia.

Again, the distribution of total animal-based exports is shown in Figure 2. The highest product among animal export items in Gaziantep province is eggs with 47%, followed by feed and additives 250 with 15%, milk and dairy products with 12%, and live animal exports with 11%.

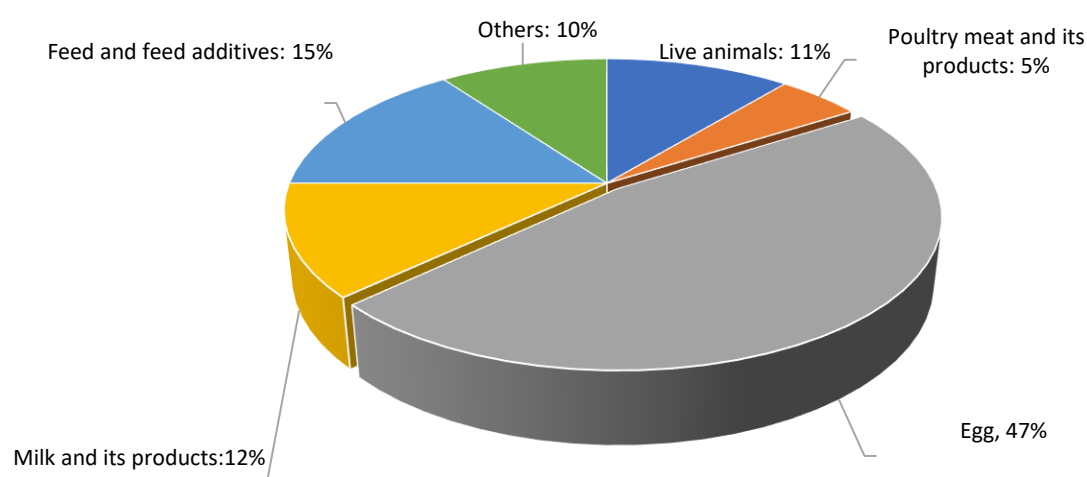
The GDP values for 2021 in our province were realised as 5.53 billion TL in crop production and 3.06 billion TL in animal production, and their ratios to the country production were 1.81% and 1.28% in the same

Table 5. Products of animal origin exported from Türkiye (Thousand US\$) (Anonymous, 2023f).

Animal Chapters	2021	2022	2023
Live Animals	106.121,167	129.006,111	1.195.976,533
Meats and offal	878.930,223	1.148.986,167	358.424,752
Milk products, eggs, honey, other edible animal Origin products	858.579,585	977.568,721	171.689,751
Other animal Origin products (bone, horn, intestine, etc.)	98.416,503	102.998,345	69.938,904
Animal And vegetable thick and liquid oils	2.080.808,276	3.538.967,264	3.215.508,838
Seafood	191.289,471	267.589,947	297.523,531
Raw hides, skins (furs) excluding) and leathers	253.123,288	259.994,102	315.505,244
Leather products (bags, home and shush belongings etc.)	413.276,875	513.244,892	623.105,932
Silk	5.924,363	1.677,082	26,646,269
Fleece, wool, hair, horsehair thread and woven Textiles	87.870,725	88.647,062	350.774.11
Total	4.974.340,476	7.028.679,693	6.625.093,864
Total agricultural in exports share (%)	21.69	26.26	23.03
Vegetable Chapters			
Renewed vegetables and some coke and tubers	1.748.932.455	2.107,567,347	1,266,183,719
Renewed fruits and hard -shelled fruits	5.367.314,161	4.943,155,761	1.263.038.136
Coffee, tea, Paraguayan tea and spice	271.280,419	285.673,271	620.241,884
Cereals	416.431,868	688.542,028	5.075.073,645
Milling products	1.439.693,364	1.900.506,528	244.484,759
Fatty seed and fruits	579.045,559	701.423,33	2.990.011,379
To be knitted convenient vegetable substances	33.306,758	38.279,01	14.940,663
Cereals, flour, starch or milk preparations, pastry products	2.168.272,512	2.626.928,718	2.668.983,962
Vegetable and from fruits in hand said preparations	2.695,915,469	3.079.430,505	205.150,690
Renewed various food preparations (coffee and tea extracts, etc.)	877.811,679	1.040.755,627	887.893,957
Cotton, cotton thread and cotton Textiles	2.265.699,974	2.263.889,736	2.746.157,883
To weave convenient other vegetable fibres, paper thread and paper from the thread	65.394,285	65.713,807	290.980,917
Total	17.929,098,503	19.741.865,668	21.594.727,329
General Total	22.903.438,979	26.770.545,361	28.769.679,330
Türkiye export values	225.214.458,038	254.169.747,663	255.437.723,543
Agricultural of exports total in exports share (%)	10.17	10.53	11.26

Table 6. Share of Gaziantep province in animal products exported in Türkiye per chapter (%).

Chapters	2021	2022	2023
Live Animals	15.70	14.57	10.91
Meats and offal	0.51	0.50	0.94
Milk products, eggs, honey, other edible animal Origin products	4.98	4.79	2.05
Other animal Origin products (bone, horn, intestine, etc.)	2.77	2.20	2.94
Animal and vegetable thick and liquid oils	30.08	21.75	19.71
Seafood	2.11	2.71	1.75
Raw hides, skins (furs) excluding) and leathers	0.09	0.02	0.02
Leather products (bags, home and shush belongings etc.)	0.23	0.29	0.40
Silk	0.40	4.95	2.46
Fleece, wool, hair, horsehair thread and woven Textiles	5.94	4.27	4.70
Renewed vegetables and some coke and tubers	1.19	0.85	0.67
Renewed fruits and hard -shelled fruits	1.90	1.83	1.22
Coffee, tea, Paraguayan tea and spice	2.76	2.84	2.80
Cereals	3.66	1.28	26.50
Milling products	22.34	19.10	19.31
Fatty seed and fruits	13.81	14.30	9.05
To be knitted convenient vegetable substances	0.85	2.67	4.52
Cereals, flour, starch or milk preparations, pastry products	40.61	41.96	40.36
Vegetable And from fruits in hand said preparations	9.64	12.78	6.99
Renewed various food preparations (coffee and tea extracts, etc.)	11.58	11.39	1.12
Cotton, cotton thread and cotton textiles	12.24	9.44	6.56
To weave convenient other vegetable fibres, paper thread and paper thread	20.83	18.00	16.15

**Figure 2.** Distribution of export shares of animal products in Gaziantep province (%)

order, and the GDP per capita was reported as \$8.725. Gaziantep, which boasts a rich cuisine that has been recognised by UNESCO, has undergone significant development in terms of industry, fertile soils, employment opportunities, and its contributions to the national economy. Strategically positioned as a trade gateway to Asian countries, Gaziantep is a frequently mentioned city. According to the Industrial Registry Information System (IRIS), 2.65% of all industrial enterprises, 4.82% of large-scale enterprises and 3.21% of medium-scale enterprises operate in our province. An examination of the sectoral distribution of enterprises operating within the province reveals that the manufacture of textile products occupies the pre-eminent position (21.75%), the manufacture of food products ranks second (18.09%), and the manufacture of leather and leather products is positioned third (Anonymous, 2023f).

In the context of academic research conducted within our nation, the contributions of agricultural activities to the national economy have been documented (Kayabaş, 2016; Semerci, 2019; Karakaya, 2023; Yanar and Savrun, 2023). It is evident that these contributions are commensurate with the impact of factors such as agricultural patterns, geographical location, and the industrial potential of the province or region. It is imperative that each study is addressed within its respective region. In this study, Gaziantep province was analysed. This province has a developed industry, large agricultural lands and high production potential. A comparison of the results with those obtained in other studies reveals numerous similarities (Mundan *et al.*, 2017; Semerci, 2018; İstikbal, 2022; Kuzu, 2022).

Conclusion

Agriculture has been the main source of livelihood for societies throughout human history and has played a critical role in the development of civilisations. Even in modern economies, the agricultural sector is vital for economic growth, employment and sustainable development. In this study, which investigated animal husbandry in agricultural production in Gaziantep province, it can be said that the production potential is much higher than the current production. Decisions in favour of animal husbandry should be taken within agricultural policies to protect and develop the existing ones and to encourage new formations. It is important to establish the necessary standards for the expansion of trade in foreign sales and to make it widespread.

In conclusion, livestock production is an indispensable component to increase the productivity of agricultural production, improve the livelihoods of rural populations and achieve sustainable development

goals. In the future, innovative approaches and the development of integrated agro-industrial systems will be essential to create an agricultural sector that is both economically and environmentally sustainable. In this framework, shaping agricultural policies with an understanding that emphasises and supports the importance of animal husbandry will contribute to ensuring food security and rural development throughout the country.

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Conflict of Interest

"The author(s) declare that they have no known competing financial or non-financial, professional, or personal conflicts that could have appeared to influence the work reported in this paper."

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