



Original article

Agricultural Structure of Tekirdağ Province and Evaluation of Agricultural Supports

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Abstract

In this study, the agricultural structure of Tekirdağ province, which has an important share in Turkey's agricultural production, especially in the production of field crops, and agricultural supports were analyzed and evaluated. In Tekirdağ province, field crops are grown on a total area of 3.827.333 decares. Wheat is cultivated on approximately 1,966,333 decares of this area and sunflower on 1,424,669 decares. According to 2021 data, Tekirdağ ranks 1st in sunflower production with 399,531 kg and 2nd in wheat agriculture with 1,026,211 kg. As of 2021, Tekirdağ realizes approximately 6% of Turkey's total wheat production and 18% of sunflower production. The share of total agricultural subsidies received by the province, which ranks high in terms of production in these two strategic products, decreased from 2.4% in 2010 to 1.9% in 2020. While the province's share of area-based subsidies for diesel-fertilizer support is around 2.8% in Turkey, its share of premium-based subsidies is 4.6%.

Keywords: Agriculture, Agricultural structure, Agricultural support, Tekirdağ Province.

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INTRODUCTION

As in the whole world, self-sufficiency in wheat and sunflower production is of great importance in our country. Especially the pandemic all over the world and the war between two countries, which are the world leaders in wheat and sunflower production, have revealed the importance of agriculture and food security. According to the International Grains Council (IGC) report, total world wheat production is 773 million tons as of 2020. While China, the EU and India are in the top three in world wheat production, Turkey ranks 9th with 20.5 million tons (IGC 2022). In terms of world wheat cultivation areas, the Commonwealth of Independent States ranks first with 52.3 million hectares, India ranks second with 33.6 million hectares and China ranks third with 23.8 million hectares. Turkey, on the other hand, has a share of 3% in total wheat cultivation areas and ranks 10th in the world with a share of 2% in total wheat production (Polat, 2021).

Russia ranks first in world sunflower production with 8.3 million tons of production and 34.8% of world sunflower production. This is followed by Ukraine with 7 million tons, the EU with 4.4 million tons, Argentina with 1.7 million tons and China with 1.3 million tons (Durum Forecast Sunflower 2021, 2021). As of 2021, 2 million tons of production was realized from approximately 7.3 million decarees of cultivation area in Turkey (TurkStat, 2021).

The contribution of Tekirdağ Province to the production of wheat and sunflower, which are the two main crops in human and animal nutrition in the world and in Turkey, is great. Each country produces various policies for this important food source (Aydın, 2022). Wheat has the largest share among the cereal crops produced in Turkey. In the Thrace region, wheat is produced on 550,000 thousand ha and has a production amount of 2.5 million tons (Konyalı and Gaytancıoğlu, 2007).

In order for an agricultural activity to be sustainable, producers must have sufficient profitability rates as in all other economic activities. When we examine the wheat cost analyzes conducted in various regions of our country, the net profit margin was calculated as -22% in a study conducted by Köksal Karadaş in Ağrı province in 2016 (Karadaş, 2016). Again, in a study conducted by Nizamettin Erbaş in Yozgat province, it is seen that the net profit margin is 08% (Erbaş, 2020). In another study conducted in Zile district of Tokat province, the net profit margin was calculated as 22% (Bayramoğlu et.al., 2002). According to the result of the wheat cost analysis conducted in Yeniçiftlik District of Marmara Ereğlisi, Tekirdağ Province, the net profit margin was calculated as 16% (Badem, 2018). The profit margin in sunflower agriculture is also important for the agriculture of the region as an alternative crop in rotation. In a study conducted by Arif Semerci in Kırklareli province, the net profit margin for sunflower was calculated as 10% (Semerci, 2019). Again, in a study conducted in Çumra district of Konya province, the profit margin in sunflower agriculture was calculated as 28.5% (Düğmeci and Çelik, 2020). In another study conducted in Tekirdağ province, sunflower net profit margin was calculated as 25% (Badem, 2019). The results of wheat and sunflower cost analysis in various regions are an important

criterion showing the strength and sustainability of regional agriculture. The average yields of sunflower and wheat in the region reveal the importance of regional agriculture.

In the study, Tekirdağ province was evaluated in two main aspects. First, the evaluation of the province in terms of agricultural production power and related agricultural supports. It is seen that Tekirdağ province has an important place in yield and total production amount in two main strategic products.

MATERIAL and METHOD

The main material of the study consists of data from the Ministry of Agriculture and Forestry, the Central Bank of the Republic of Turkey, the Ministry of Treasury and Finance, the Strategy Budget Presidency and the Turkish Statistical Institute (TURKSTAT) on the agricultural structure and agricultural subsidies in Tekirdağ province. Time series are utilized for the detailed evaluation of agricultural support policies. The fluctuations and changes in these series are interpreted to evaluate the policies in practice.

In this context, in order to be able to observe the changes in agricultural subsidies from past to present, subsidies have been realized using the 2003-based "Consumer Price Index (CPI)" values. At the same time, agricultural subsidies distributed using CBRT data are converted by taking into account the exchange rate of the US dollar.

For real support values:

Real Support Amount of the Relevant Year = (Current support amount of the relevant year / CPI value of the relevant year) * 100

Agricultural Structure of Tekirdağ Province:

As of 2021, Turkey's wheat cultivation area is 67.446.655 decares ("TÜİK", 2022). It is seen that Konya Province ranks 1st in this total cultivation area with 5,801,100 decares. According to 2020 data, Tekirdağ province has 1.966.333 decares of cultivation area and 769.915 kg of wheat production ("T.R. TOHB 2020", 2020). According to 2021 data, the cultivation area of Tekirdağ Province was 1.924.125 decares and the total amount of wheat produced was 1.026.611 kg (Table 1). In this result, when the climatic conditions are favorable, although the cultivation area shrinks, the amount of production increases, causing Tekirdağ Province to rank second.

Table 1. Tekirdağ Province Crop Production Area and Quantities in 2020

Products	Planting Area	Production Amount	Area % Share
Wheat	1.966.333	769.915	93
Barley	134.948	54.013	6
Paddy	26.070	20.778	1
Cereals Total	2.127.351	844.706	100
Sunflower	1.424.669	353.982	93
Canola	114.508	37.831	7
Oil Seeds Total	1.539.177	391.813	100

Source: Tekirdağ Provincial Directorate of Agriculture

Wheat and sunflower have a 93% share in the provincial agriculture. Barley (6%) is the second alternative crop in cereal production, while canola (7%) is the second alternative crop in oilseeds (Table 1).

Table 2. Wheat Production by Provinces in Turkey (Tons)

Cities	2010 Weath Product	2020 Weath Product	2021 Weath Product
Konya	1.027.260	1.301.497	1.093.198
Ankara	868.513	887.869	562.099
Şanlı Urfa	488.898	790.319	589.522
Tekirdağ	508.482	769.915	1.026.611
Diyarbakır	610.735	717.351	400.326
Adana	707.817	601.724	707.343
Total Product	19.674.000	20.500.000	17.650.000

Source: TurkStat. Created by author

When Tekirdağ province, which ranks first in Turkey's total wheat production, is analyzed in terms of wheat yields, the average yield of Konya province was 307 kg / decare for 2020, while the average yield in Tekirdağ province was calculated as 392 k / decare in the same year. Looking at the 2021 data, it is seen that while the average yield of Konya province is 276 kg / decare, Tekirdağ province increased to 534 kg / decare. It is seen that the wheat yield average of Tekirdağ province is close to the wheat yield averages of China and the EU. Since these yield averages occur under dry farming conditions, the contribution of Tekirdağ province to Turkey's wheat production will be more clearly understood when we evaluate it in terms of both production amount and yield.

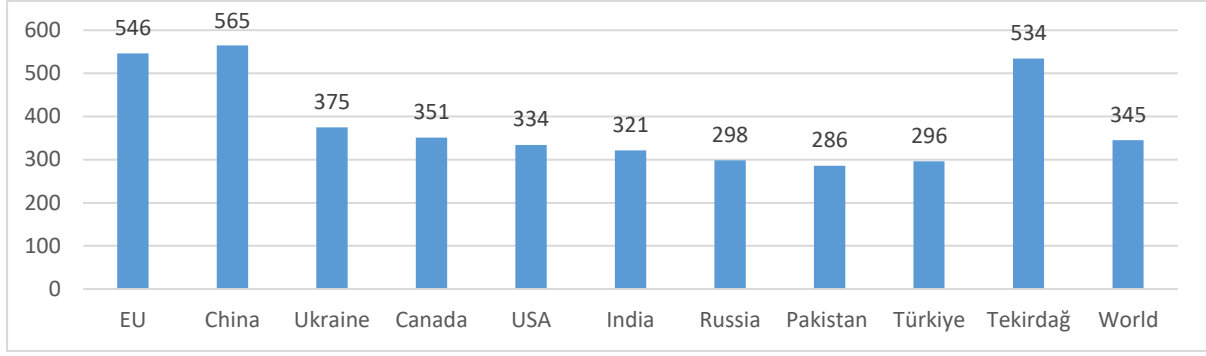


Figure 1. Wheat Yield Averages of Some World Countries, Turkey and Tekirdağ Province 2021

Source: Created by the author from TurkStat data (2021).

The world average in terms of the amount of wheat obtained from one dectare of land is 345 kg/dectare. China ranks first in wheat yield with 565 kg/dectare, while the EU ranks second with 546 kg/dectare. Turkey's yield average is 296 kg/dectare, which is below the world average. However, the yield average of Tekirdağ Province is 534 kg/dectare, just after the two countries ranking first in the world (Figure 1). These values show the importance of Tekirdağ Province in the wheat production of the country. The favorable climatic conditions in the region increase the importance of wheat yield obtained without the need for irrigation.

In sunflower production, which is another important product of the region, it is seen that the cultivation areas of Turkey increased from 5,514,000 decares in 2010 to 8,113,116 decares by 2021. In terms of production amount, it is seen that the production, which was 1,170,000 kg in 2010, increased to 2,215,000 kg in 2021. Tekirdağ Province ranks first in terms of its contribution to the country's sunflower agriculture. As of 2020, Tekirdağ Province ranks first with 21.9% of the sunflower cultivation areas throughout the country (State Forecast Sunflower 2021, 2021). As of 2010, the sunflower cultivation area in Tekirdağ Province was 1,365,073 decares and the production amount was 259,562 kg. In 2021, these values increased to 1,663,007 decares and the production amount increased to 399,531 kg (TÜİK, 2021). Tekirdağ province produces 18% of Turkey's total sunflower production.

Table 3. Sunflower Production by Province in Turkey

Province	2010 Sunflower Product	2020 Sunflower Product	2021 Sunflower Product
Tekirdağ	259.562	353.982	399.531
Konya	46.764	278.546	324.790
Edirne	332.894	240.434	285.286
Türkiye	1.170.000	1.900.000	2.215.000

Source: TurkStat.

As of 2010, Tekirdağ, which ranked second in sunflower production, ranked first in the country with 339,351 kg in 2021. This is followed by Konya province with 324,790 kg. The performance of Tekirdağ province in these crops is more clearly demonstrated by the amount of product obtained per unit area.

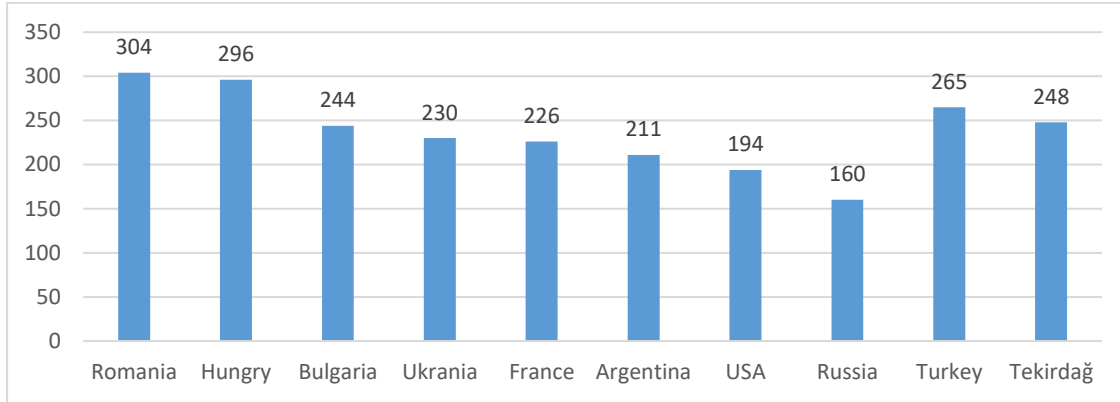


Figure 2. Sunflower Yield Averages of Some World Countries, Turkey and Tekirdağ Province 2020

Source: Created by the author from TurkStat data.

Agricultural Support Policies in Practice in Turkey:

As of 2001, Turkey abandoned the existing agricultural support policies and started a radical reform in agricultural support policies within the scope of the Agricultural Reform Implementation Project (ARIP). The agricultural support policies implemented in Turkey are regulated by the Agricultural Law No. 5488 published in the Official Gazette dated April 26, 2006. The main purpose of this law is to determine the necessary policies and regulations for the development and support of the agricultural sector and rural areas in line with development plans and strategies. This law also covers the procedures and principles regarding the determination of the purpose, scope and subjects of agricultural policies, the definition of agricultural support programs, the determination of market regulations and administrative structuring and financing for the implementation of these programs, and the implementation of priority research and development programs to be implemented in the agricultural sector.

When the agricultural support policies implemented in our country are analyzed, it is noteworthy that these policy formations are based on economic, social and environmental sensitivities. However, by evaluating the data obtained through these policy analyses, it will also provide the opportunity to analyze the effectiveness of the supports and to control the policies implemented and to change them when necessary (Kıymaz, 2019).

In general, subsidization is defined as the totality of measures taken to protect agriculture, encourage agricultural activities and make agriculture sustainable (Eraktan, 2001). In this context, although agricultural support instruments vary from country to country, the main objectives of agricultural support policies are similar. The main objectives of agricultural subsidies are stated as

increasing the effectiveness of the agricultural policies implemented and facilitating the adaptation of the sector to these policies.

Agricultural support instruments in line with these objectives and principles and according to the relevant law;

Area Based Agricultural Support Payments

Compensatory Payments

Difference Payment (Premium) Supports

Livestock Supports

Agricultural Supports for Rural Development

Agricultural Insurance Support Services

Other Agricultural Supports.

In this study, since wheat and sunflower agriculture has an important place in the field agriculture realized in 96.32% of Tekirdağ province, agricultural supports for these two products were taken into consideration. Therefore, an evaluation was made in terms of area-based and premium-based agricultural subsidies among the above-mentioned agricultural support instruments.

Table 4. Turkey Agricultural Support Budget Breakdown 2020-2022

Support Subject	Support Budget (Million TL with Current Prices)			Share in Support Budget		
	2020	2021	2022	2020	2021	2022
1- Area-Based Agricultural Support Payments	5021	5895	7300	22,9	25,7	28,3
Area -Based Supplementary Payment	22	316	316	0,1	1,4	1,2
Diesel	2901	2724	3107	13,2	11,9	12
Fertilizer	840	1601	1599	3,8	7,0	6,2
Use of Certified Seeds and Saplings	258	387	418	1,2	1,6	1,7
ÇATAK	150	7	0	0,7	0	0
Hazelnut	850	859	860	3,9	3,7	3,3
Yield Loss	0	0	1000	0	0	3,9
2- Compensatory Payments	301	361	367	1,4	1,6	1,4
Plant Quarantine Compensation	7	12	8	0	0,1	0
Potato Wart Support	0	0	140	0	0	0,1
Tea Pruning Costs and Compensation	294	349	346	1,3	1,5	1,3
3- Differential Payment Support	5372	5070	5475	24,5	22,1	21,2
Cereals and Pulses	1955	1752	1874	8,9	7,6	7,3
Tea	182	189	190	0,8	0,8	0,5
Products with Supply Deficit	3235	3129	3411	14,7	13,6	13,2
4- Livestock Support Payments	7857	7366	7620	35,8	32,1	29,5
5- Agricultural Support for Rural Development	841	1749	1850	3,7	7,6	7,2
6-Agricultural Insurance Support Services	1473	1250	1924	6,7	5,4	7,4
7- Other Agricultural Support	1106	1275	1298	5	5,6	5
TOTAL	21.944	22.966	25.834	100	100	100

Source: Ministry of Agriculture and Forestry, Ministry of Treasury and Finance, Strategy and Budget Directorate

The characteristic of area-based agricultural subsidies is that they are provided in relation to the amount of land that agricultural holders indicate in the ÇKS. In this type of support, there is no connection with the amount of production.

In 2022, the agricultural subsidies to be made in 2022 are stated as follows within the scope of plant production support payments with the decision dated October 20, 2022 and numbered 31989. Diesel-fertilizer Support, Soil Analysis Support, Organic Agriculture Support, Good Agricultural Practices Support, Small Family Business Support, Hazelnut Area-Based Income Support, Solid Organic-Organic-Mineral Fertilizer Support, Support for Rehabilitation of Traditional Olive Gardens. As of 2020, "Area-Based Support" payments, which were included in the support budget as 5.021 billion TL, increased to 7.3 billion TL in 2022. Area-based agricultural support payments constitute 28.3% of total payments. It is seen that diesel and fertilizer support has the highest share in area-based agricultural support with 18.2%.

In 2021, 22 TL/da diesel oil and 20 TL/da fertilizer support payment was made for wheat and 29 TL/da diesel oil and 8 TL/da fertilizer support payment was made for sunflower. Due to the economic reasons experienced in our country and the crises experienced all over the world, as a result of this situation, agricultural supports have been increased to 75 TL/da diesel oil and 46 TL/da fertilizer support for wheat and 88 TL/da diesel oil and 21 TL/da fertilizer support for sunflower as of 2022.

Another support item of crop production support that is linked to the amount of production is the Difference Payment Support, also known as premium support. Differential payment support is the amount of support obtained by multiplying the amount of product produced by agricultural producers and the premium amount determined by the state. Producers apply with their sales invoices and receive income support as a result of the multiplication of the production amount and the premium amount, provided that they do not exceed the production amount specified in the ÇKS (Demirdöğen, 2019). The difference payment support, which constitutes 21.2% of the agricultural support budget in Turkey in recent years, is defined in the Agricultural Law No. 5488 as follows Differential Payment; farmers are given differential payment support taking into account production costs and domestic and foreign prices. Differential payment support primarily covers products with supply deficit. Each year, the products to be covered by the differential payment and the payment amounts are determined by the authorized Board. It is stated that farmers who will benefit from the differential payment support may be asked for activity certificates and documents related to product sales (Table 4).

Differential payment support is provided for cereals and pulses, tea and products with supply deficit. In order to ensure production planning and increase production and productivity by taking agricultural production under control, the products to be supported for 941 basins were specified and published in the official gazette dated 18.07.2017 and the basin-based production support model was introduced. While 30 basins were prioritized for cereals, 26 basins were identified for oilseed crops, which are in the first place in the group of products with supply deficit. Within the scope of differential payment support, it is currently determined as corn and legumes in our country, covering sunflower, soybeans, cotton and other oilseed crops.

Differential payment support is the support paid to producers depending on the amount of production in order to achieve self-sufficiency in products with supply deficit in our country. The premium support paid for wheat in 2021, provided that production is carried out in the specified basins, continued to be 10 krş/kg, while this figure was set at 50 krş/da for sunflower. In 2022, while the premium support for wheat remained at 10 krş/da, this figure was increased to 70 krş/da for sunflower.

Agricultural Supports in Turkey and Tekirdağ Province:

The general price-based support purchases, which had been practiced in Turkey from the 1930s until the 2000s, changed shape under the guidance of the WTO, the WB and the IMF and led to a radical

change in agricultural policies in the 2000s (Doğruel et.al., 2003). In 2000, with the agreement made with the World Bank, the Agricultural Reform Implementation Project (TRUP- ARIP) came into effect. The agricultural support model until this year was abandoned and replaced by Direct Income Support (Başdemir, 2021). Implemented in 2002, this support model continued until 2008. The basis of the agricultural support policies that have been in effect since 2008 in crop production is area-based and premium-based support.

The total value of agricultural subsidies, which was 2.2 billion TL in 2002, increased approximately 12.9 times and reached 29 billion TL in 2022. The reason for the decline in current prices in 2008 was the abolition of FSA in 2009 and the transition to area-based premium-based support. In 2018 and the following years, it is seen that the increases in the current support price were not misled by the increases in real and dollar terms due to economic reasons. It is seen that the increase of 12.9 times in current prices is 1.9 times in real prices and the increases in dollar terms remain within the same range. The highest point in real prices was reached in 2008 with TL 4.7 billion, while the highest point in dollar terms was reached in 2008 with \$4.8 billion (Table 5).

Table 5. Agricultural Support Amounts in Current Prices, Real Prices and Dollars in Turkey 2002-2022 (TL 000)

Year	Support	Real Support	Support \$
2002	2.232.000	2.426.087	1.532.967
2003	2.736.000	2.736.000	1.951.498
2004	2.965.959	2.731.086	2.042.671
2005	3.611.113	3.073.811	2.688.841
2006	4.834.000	3.754.272	3.299.659
2007	5.643.000	4.029.851	4.242.857
2008	5.839.000	3.775.378	4.770.425
2009	4.674.000	2.844.450	3.050.914
2010	5.821.000	3.262.892	3.560.245
2011	7.054.000	3.713.609	4.221.424
2012	7.333.000	3.545.252	4.091.391
2013	8.687.000	3.907.255	4.566.577
2014	9.150.000	3.780.679	4.184.196
2015	9.971.000	3.826.317	3.666.213
2016	11.488.000	4.090.440	3.805.864
2017	12.770.000	4.091.113	3.486.118
2018	14.514.000	3.996.916	3.003.104
2019	16.989.000	4.062.022	2.989.442
2020	21.969.000	4.678.336	3.116.612
2021	24.125.000	4.528.730	2.719.321
2022	29.000.000	4.754.098	1.613.800

Source: Ministry of Agriculture and Forestry, Strategy and Budget Directorate, TurkStat, Central Bank.

In the 2000s, agricultural supports in current, real and dollar prices experienced significant deviations from current prices, dollar prices and real prices, which continued to increase after 2009. From 2002 until 2018, real and dollar-based supports, which were approximately equal, changed against dollar supports after this year (Figure 3).

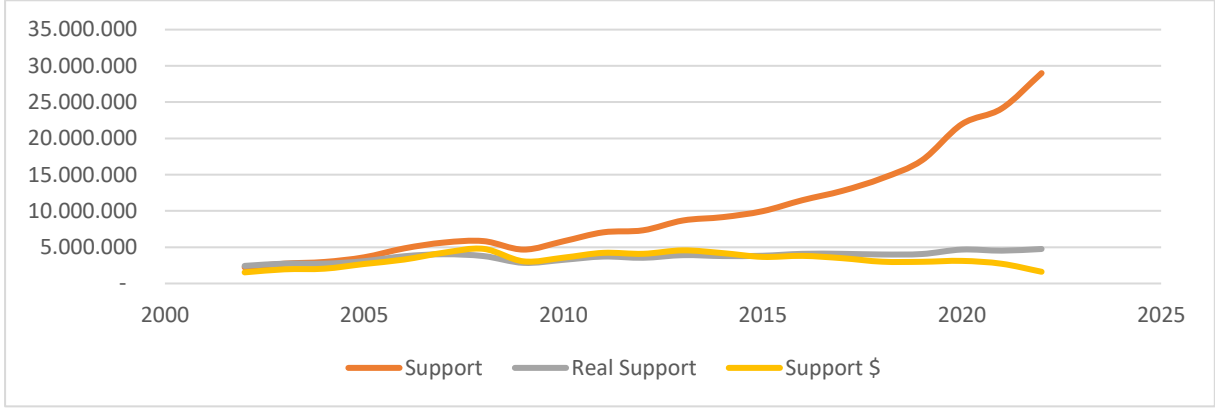


Figure 3. Agricultural Supports in Current, Real and Dollar Prices by Years

It is important to compare the agricultural support amounts of Tekirdağ province with the agricultural support amounts given in the country in return for its agricultural success and production potential. In 2002, Tekirdağ received a total of 45 million TL of Direct Income Support. With current prices, the total amount of agricultural support received by Tekirdağ province increased approximately 10 times until 2020, while the amount of increase in 2022 was approximately 20 times. Again, when the supports of Tekirdağ province are analyzed in terms of real prices, it is seen that the supports, which were 49 million TL in 2002, reached 152 million TL in 2022. The dollar equivalent of agricultural supports in Tekirdağ province decreased from 30.9 million dollars in 2002 to 51.7 million dollars in 2022.

Table 6. Agricultural Support Amounts in Current Prices, Real Prices and Dollars in Tekirdağ Province 2002-2022 (000.000 TL)

Year	Tekirdağ Total Agricultural Supports	Real Support	Support \$
2002	45	49	30,9
2003	69	69	49,2
2004	81	75	55,8
2005	138	117	99,7
2006	149	116	101,2
2007	169	121	127,1
2008	144	93	117,6
2009	145	88	94,6
2010	146	82	96,9
2011	211	111	126,3
2012	225	109	125,5
2013	231	104	121,4
2014	268	111	122,6
2015	270	104	99,3
2016	297	106	98,4
2017	302	97	82,4
2018	300	83	62,1
2019	411	98	72,3
2020	436	93	61,9
2021	538	101	63,4
2022	927	152	51,7

Source: Created by the author using data from Tekirdağ Provincial Directorate of Agriculture, Central Bank of the Republic of Turkey and TURKSTAT

In terms of the dollar equivalent of the agricultural supports distributed in the country, the highest figure received by Tekirdağ province was realized in 2007 with 127.1 million dollars. It is seen that agricultural supports in dollar terms have been on a downward trend starting from 2014 until today. (Table 6).

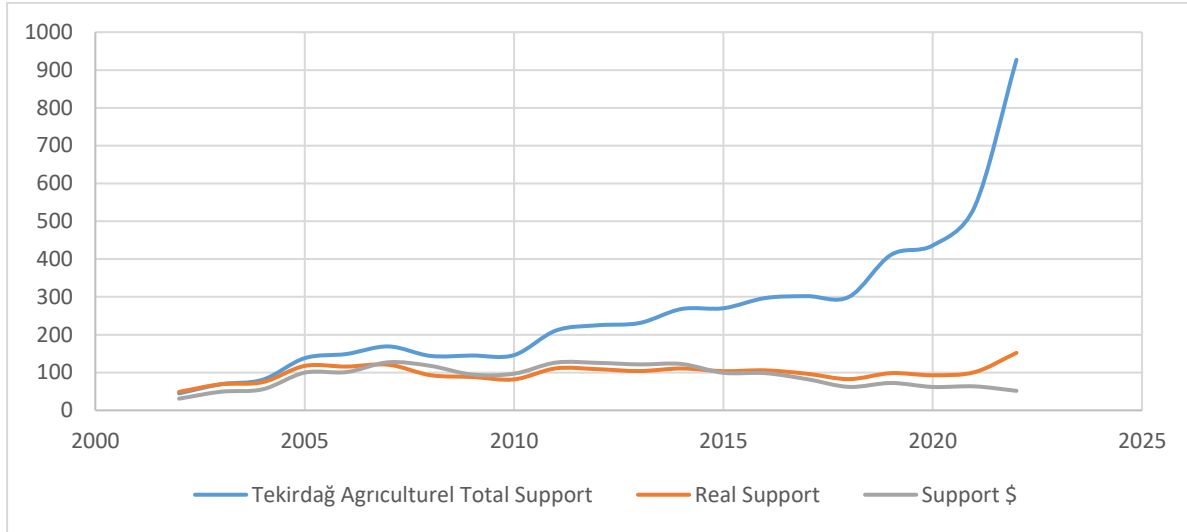


Figure 4. Agricultural Subsidy Amounts in Current, Real and Dollar Prices in Tekirdağ Province by Years

It is also observed that the course of current, real and dollar-based prices of agricultural subsidies in the country and the course of agricultural subsidies in Tekirdağ province show a close change (Figure 4).

Due to its agricultural structure, Tekirdağ province received the highest amount of agricultural subsidies from the premium support for oilseed crops with approximately 164 million TL, while the second highest amount was 108.2 million TL from the diesel fertilizer support, which is included in the area-based support group. In the third place, it is seen that the support given as 10 krş/kg as cereals differential payment support amounted to approximately 75 million TL (Table 7).

Table 7. 2020 Tekirdağ Crop Production Support Amounts

Crop Productuon Support 2020	Support Amount (TL)	% Distribution
Oilseeds Differential Payment + Additional Contracted Production Support	163.996.024,60	44,17
Diesel, Fertilizer and Soil Analysis Support	108.298.478,00	29,17
Grain Differential Payment Support	74.932.419,96	20,18
Certified Seed Production Support	6.278.971,02	1,69
Certified Seed Use Support	7.254.185,67	1,95
Fodder Crop Support	5.877.827,94	1,58
Other Support	4.640.419,01	1,25
Total	371.278.326,20	100,00

Source: Created by the author from Tekirdağ Provincial Directorate of Agriculture data.

In Tekirdağ province, 93.4% of the agricultural subsidies distributed consist of oilseeds differential payment, cereals differential payment and diesel fertilizer subsidies.

As in the rest of the world, one of the most important criteria used in the measurement of agricultural supports and making them comparable is the calculation of the ratio of agricultural supports to GDP and the ratio of agricultural supports to budget.

Turkey's GDP between 2002 and 2021 increased 20 times from 362 billion TL to 7.2 trillion TL. In terms of agricultural supports, agricultural supports increased 10.8 times from 2.2 billion TL in 2002 to 24.1 billion TL in 2021. While the total support of Tekirdağ province was 45 million TL in 2002, it increased 11.9 times and reached 538 million TL in 2021 (Table8).

Table 8: Ratio of Agricultural Supports in Turkey and Tekirdağ Province to Turkey's GDP and Budget

Year	Turkey GDP	Turkey Budget	Turkey Agricultural Subsidies	Agricultural Support Amounts in	Agricultural Subsidies/ Turkey GDP	Agricultural Subsidies/ Turkey Budget	Tekirdağ Agricultural Subsidies/GDP	Tekirdağ Agricultural Subsidies/
2002	362 109 648	119.603.824	2.232.000	45.000	0,0062	0,0187	0,0001	0,0004
2003	472 171 775	141.247.793	2.736.000	69.000	0,0058	0,0194	0,0001	0,0005
2004	582 852 799	152.092.573	2.965.959	81.000	0,0051	0,0195	0,0001	0,0005
2005	680 275 847	159.686.603	3.611.113	138.000	0,0053	0,0226	0,0002	0,0009
2006	795 757 109	178.126.033	4.834.000	149.000	0,0061	0,0271	0,0002	0,0008
2007	887 714 414	204.067.683	5.643.000	169.000	0,0064	0,0277	0,0002	0,0008
2008	1 002 756 496	227.030.562	5.839.000	144.000	0,0058	0,0257	0,0001	0,0006
2009	1 006 372 482	268.219.185	4.674.000	145.000	0,0046	0,0174	0,0001	0,0005
2010	1 167 664 479	294.358.724	5.821.000	146.000	0,0050	0,0198	0,0001	0,0005
2011	1 404 927 615	314.606.792	7.054.000	211.000	0,0050	0,0224	0,0002	0,0007
2012	1 581 479 251	361.886.686	7.333.000	225.000	0,0046	0,0203	0,0001	0,0006
2013	1 823 427 315	408.224.560	8.687.000	231.000	0,0048	0,0213	0,0001	0,0006
2014	2 054 897 828	448.752.337	9.150.000	268.000	0,0045	0,0204	0,0001	0,0006
2015	2 350 941 343	506.305.093	9.971.000	270.000	0,0042	0,0197	0,0001	0,0005
2016	2 626 559 710	584.071.431	11.488.000	297.000	0,0044	0,0197	0,0001	0,0005
2017	3 133 704 267	678.269.193	12.770.000	302.000	0,0041	0,0188	0,0001	0,0004
2018	3 758 773 727	757.996.000	14.514.000	300.000	0,0039	0,0191	0,0001	0,0004
2019	4 311 732 766	1.000.026.856	16.989.000	411.000	0,0039	0,0170	0,0001	0,0004
2020	5 048 220 067	1.202.236.469	21.969.000	436.000	0,0044	0,0183	0,0001	0,0004
2021	7 248 788 983	1.346.100.000	24.125.000	538.000	0,0033	0,0179	0,0001	0,0004

Source: Created by the author from TURKSTAT, Ministry of Agriculture and Forestry, Tekirdağ Provincial Directorate of Agriculture data.

While the share of the agricultural support budget in Gross Domestic Product (GDP) was 0.62% in 2022, this ratio decreased to 0.33% in 2021. The highest ratio of agricultural support to GDP in Turkey was 064% in 2007. Accordingly, the share of the agricultural support budget in the public central government budget is also decreasing. In 2002, the agricultural support budget accounted for 1.8% of the central government budget, while in 2021 this ratio was 1.7%. Again, this ratio reached its highest level in 2007 with 2.3%.

When we look at the share of Tekirdağ province from GDP, it is seen that this rate follows an approximate course of 2001%. Again, it is seen that this ratio was realized at the rate of 002% in 2005. The share of agricultural subsidies distributed in Tekirdağ province from the central budget reached its highest level in 2005 with 009%. As of 2021, this rate was realized as 0.004%.

RESULTS and DISCUSSION

Wheat and sunflower, which have a strategic importance in our country as in the whole world, must be able to reach sufficient profitability for the sustainability of agriculture. For this purpose, it is of vital importance that the price and support amounts of wheat and sunflower are determined correctly.

Due to the fact that wheat and sunflower are products that are traded in world markets, the producers of the country and the region are constantly under low price pressure. In terms of basic inputs, these products require us to work with high costs as a result of our foreign dependence on energy and fertilizers. The condition for making agricultural enterprises more profitable is low cost and good pricing policy.

It is seen that Tekirdağ province has a great advantage with the amount of yield obtained from unit area in wheat and sunflower. Tekirdağ province ranks first in Turkey with a wheat yield of 534 kg/da, while the Turkish average of 265 kg/da for sunflower is followed by 248 kg/da despite the fact that agriculture is practiced under dry conditions. The fact that Tekirdağ province ranks first in the country in terms of yield in these two crops and is even in the world yield averages makes the region advantageous in agricultural terms.

However, in terms of wheat price, although it is seen that there is an increase in current prices, it is seen that the price of wheat, which was 37 krş/kg in 2003 in real prices, decreased to 35 krş/kg in 2020. Again in sunflower, the real price of 46 krş/kg in 2003 was calculated as 96 krş/kg in 2021. Again, in a study conducted in Tekirdağ province, it was calculated that this price was 25 cents/kg in dollar terms in 2002 and 26 cents/kg in 2021 (Badem and Hurma, 2021).

While Tekirdağ province produces approximately 5% of the total wheat and 20% of the total sunflower produced in Turkey, its share of total agricultural subsidies is 2.2%. Looking at the amount of change in agricultural subsidies between 2002 and 2021, the amount of support received by the western Marmara region increased 4.6 times from 171 million TL in 2002 to 793 million TL in 2018, while the highest increase was 25.3 times in the eastern Black Sea region (Bal, 2019).

It is seen that strategic decisions on product price policy, support policy and industrialization and migration policies are needed for the sustainability of Tekirdağ provincial agriculture, which provides a great advantage to Turkey's agricultural power and has the soil, climate, labor force and agricultural mechanization that can compete with world agriculture with its yield averages.

REFERENCES

- Aydın, A. (2022). Türkiye’de Buğday Üretim Sektörünün Yapısı ve ARIMA Modeli İle Üretim Tahmini. *İşletme Ekonomisi ve Yönetim Araştırmaları Dergisi*, 1(1), 18.
- Badem, M. (2018). *Tekirdağ ili Marmara Ereğlisi İlçesi Yeniçiftlik Mahallesi’nde Bir Tarım İşletmesinde Buğday Üretim Maliyetinin Hesaplanması*. Tekirdağ.
- Badem, M. (2019). *Canola and Sunflower Cost and Profitability Analysis for 2017 -2018*.
- Badem, M. ve Hurma, H. (2021). Temel Stratejik Ürün Olan Buğdayda Destekleme Politikalarına Genel Bir Bakış. *Trakya Üniversitesi Mühendislik Bilimleri Dergisi*, 22(1), 21–30. <http://dergipark.gov.tr/tujes> adresinden erişildi.
- Bal, G. (2019). *Türkiye’de Tarım Desteklerinin Bölgesel Dağılımı 2002-2018*. Hacettepe Üniversitesi, Ankara.
- Başdemir, Ş. (2021). *2001-2020 Döneminde Türkiye’de Tarım Alanları ve Bitkisel Ürünlere Yönelik Tarımsal Destekleme Ödemelerinin Seyri ve Değerlendirilmesi*. Marmara Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Bayramoğlu, Z., Göktolga, Z. G. ve Gündüz, O. (2002). Tokat İli Zile İlçesinde Yetiştirilen Bazı Önemli Tarla Ürünlerinde Fiziki Üretim Giderleri ve Maliyet Analizleri. *Tarım Ekonomisi Dergisi*, 11(2), 101–109.
- Demirdöğen, A. (2019). Türkiye’de Tarımsal Destekler, 319–329.
- Dogruel, F., Dogruel, A. S. ve Yeldan, E. (2003). Macroeconomics of Turkey’s agricultural reforms: an intertemporal computable general equilibrium analysis. *Journal of Policy Modeling*, 25(6–7), 617–637. doi:10.1016/S0161-8938(03)00056-5
- Düğmeci, Y. H. ve Çelik, Y. (2020). Konya İli Çumra İlçesinde Yağlık Ayçiçeği Üretim Maliyetinin Tespiti Üzerine Bir Araştırma. *Türk Doğa Bilimleri Dergisi*.
- Durum Tahmin Ayçiçeği 2021*. (2021). Ankara.
- Eraktan, G. (2001). *Tarım Politikasının Temelleri ve Türkiye’de Tarımsal Destekleme Politikası*. (Can, Ed.) (Uzel Yayın.). Ankara: Uzel Yayınları.
- Erbaş, N. (2020). Yozgat İli Tarım İşletmelerinde Kışlık Buğday (Triticum aestivum L.) Üretim Maliyet Analizi. *Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi*, 10, 1318–1328.
- Karadaş, K. (2016). Ağrı İli Tarım İşletmelerinde Buğday Üretim Maliyetinin Hesaplanması. *Alinteri*, 33–41. <https://dergipark.org.tr/tr/download/article-file/267329> adresinden erişildi.
- Kıymaz, T. (2019). Tarımsal Desteklerin Etkileri Çerçevesinde Bitkisel Üretim İçin Politika Alternatifleri. *Ekonomik Yaklaşım Derneği*, 32(119), 103–141. https://www.researchgate.net/publication/351979288_Tarimsal_Desteklerin_Etkileri_Cercevesinde_Bitkisel_Uretim_Icin_Politika_Alternatifleri adresinden erişildi.
- Konyalı, S. ve Gaytancıoğlu, O. (2007). Türkiye’de Buğdayda Uygulanan Tarım Politikaları ve Trakya Bölgesi Üreticilerinin Sorunları. *Tekirdağ Ziraat Fakültesi Dergisi*, 4(3).

- Polat, K. (2021). 2020 Yılı Hububat Sektör Raporu. Ankara. <https://www.tmo.gov.tr/Upload/Document/sektorraporlari/hububat2020.pdf> adresinden eriřildi.
- Semerci, A. (2019). Yaęlık Ayçiçeęi Üretiminin Ekonomik Analizi: Kırklareli İli Örneęi. *Türk Tarım ve Doęa Bilimleri Dergisi*, 6(4), 616–623. doi:10.30910/turkjans.633530
- T.C. TOHB 2020. (2020). 9 Temmuz 2021 tarihinde [https://www.tarimorman.gov.tr/SGB/Belgeler/Bakanlik_Faaliyet_Raporlari/TARIM VE ORMAN BAKANLIęI 2020 FAALİYET RAPORU v.pdf](https://www.tarimorman.gov.tr/SGB/Belgeler/Bakanlik_Faaliyet_Raporlari/TARIM_VE_ORMAN_BAKANLIGI_2020_FAALIYET_RAPORU_v.pdf) adresinden eriřildi.
- TÜİK. (2021). Türkiye İstatistik Kurumu. 14 Temmuz 2021 tarihinde <https://www.tuik.gov.tr/> adresinden eriřildi.