Agribusiness in the Turkish economy

Agrární sektor v rámci turecké ekonomiky

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Abstract: Agribusiness has made many important contributions to the Turkish economy. These contributions related to meeting of the nation's food demand, creating added value, increasing and diversifying exports and increasing employment. While the relative importance of the Turkish agriculture sector decreases over the years, in the economy, agribusiness still preserves its place and developments. This paper assesses the contribution of agribusiness to the economy during the period 1994–2004, in terms of production and export values and the firms working in this area. Within the agribusiness, the most stable and best-developed industries were food and textile in the period concerned. Changes in the economy influences agribusiness but the basic problem that affects it is development is the integration with the agricultural sector. That is the downstream relations, which is not the desired level at all.

Key words: agribusiness, food industry, beverages industry, textile industry, Turkey

Abstrakt: Agrokomplex přispívá významným způsobem rozvoji turecké ekonomiky uspokojováním národní poptávky po potravinách, vytvářením přidané hodnoty, diversifikací exportu a zvyšováním úrovně zaměstnanosti. I když se v průběhu let význam tureckého agrokomplexu relativně snižuje, stale si udržuje své místo v ekonomice země a jejím rozvoji. Předložená práce hodnotí přínos agrokomplexu pro národní ekonomiku Turecka v období let 1994–2004, vyjádřený hodnotou produkce a exportu a počtem podniků v této produkční oblasti. V rámci agrokomplexu byly v daném časovém období nejstabilnějšími a nejrozvinutějšími odvětvími potravinářský a textilní průmysl. Změny v národní ekonomice ovlivnily rovněž agrokomplex, základním problémem, který ovlivňuje jeho celkový rozvoj, je však integrace zpracovatelských odvětví se zemědělskou prvovýrobou. Toto vertikální propojení zdaleka není na žádoucí úrovni.

Klíčová slova: agrokomplex, potravinářský průmysl, odvětví výroby nápojů, textilní průmysl, Turecko

As a developing country, agricultural sector has an important place in the Turkish economy. In order to make the necessary contribution to the economic development, agricultural sector itself should mainly be developed and have a strong structure. Therefore, through the strong structure it will support and improve the agribusiness with the present dynamics. Similarly, agribusiness will create an attractive effect for agricultural sector related to its connection with raw materials. Of course, firms in agribusiness contribute to employment and export by creating added value and processing agricultural products.

The purpose of this study is to examine the importance of agribusiness in the Turkish economy. Developments in agribusiness were analysed through some economic indicators such as the number of firms, production and export values in the period 1994–2004. The coverage of agribusiness consists of Food, Beverages, Tobacco, Textile, Leather, Paper, and Wood Products Industry.

AGRICULTURE SECTOR IN THE TURKISH ECONOMY

For this purpose, the share of agriculture in GDP, in employment and in foreign trade is analyzed, respectively. In Turkey, the relative importance of agri-

Table 1. The share of agriculture sector in GDP (at 1987 constant prices), in Billions of Tl

	GDP* (1)	Agriculture (2)	Share of agriculture sector in GNP (2/1 × 100) (%)
1994	91.733	14.358	15.7
1995	99.028	14.640	14.8
1996	106.080	15.284	14.4
1997	114.874	14.927	13.0
1998	119.303	16.176	13.6
1999	112.044	15.369	13.7
2000	199.144	15.962	8.0
2001	107.783	14.923	13.8
2002	116.338	15.948	13.7
2003	123.165	15.549	12.6
2004	135.308	15.863	11.7

*in purchasers' value

Source: SPO (various years), Turkey Main Economic Indicators, Ankara

Table 2. The share of agriculture sector in the total employment, in thousand

	Total employment (1)	Agriculture (2)	Share of agriculture in the total employment (2/1 × 100) (%)
1994	20 009	8 813	44.0
1995	20 587	9 080	44.1
1996	21 197	9 259	43.6
1997	21 205	8 837	41.6
1998	21 780	9 039	41.5
1999	21 324	8 856	41.5
2000	21 580	7 769	36.0
2001	21 524	8 089	37.6
2002	21 354	7 458	34.9
2003	21 450	7 586	35.4
2004	22 820	7 400	32.4

Note: (1) The results before 2003 revised according to the results of the 2000 Census of Population; (2) The results which have been given for the population 12 years old and over up to 2000, have been given for the 15 years old and over since year 2002.

Sources: 1-SPO (2004). Economic and Social Indicators (1950–2003)Ankara; 2-SPO (2005). http://ekutup.dpt.gov.tr/teg/2005/12/tix.xls

cultural sector, within GDP, has decreased in the last decades. While the share of agriculture was 15.7% in 1994, the figure came down to 11.7% in the year 2004 (Table 1). Whereas in some other countries such as Greece, Ireland, Germany and the United States, the shares of agricultural sector within GDP respectively are 6.7%, 5.0%, 1.0% and 1.4% in the year 2004 (CIA 2005). This figure shows that agriculture is still the important sector in Turkish economy.

Agricultural sector has made an important contribution to the Turkish economy in terms of employment, as well. However, this contribution has decreased over the years. It was 44.0% in 1994, it came down to 41.5% in 1999 (Table 2). However, it should note that the decrease after the year of 2000 is due to the differences in data gathering method. In the EU-15, the share of agriculture sector in total civilian employment is 4.5% in 1999; the shares are 5.8% for the EU-25 and 2.4% for the USA in the same year (EUROSTAT 2005).

The major source of income from the Turkish export are agricultural products due to the composition of general export. Nevertheless, the share of raw agricultural products among the export of total agricultural products has been gradually decreasing. The export of raw products, which had a 12.7% share in 1994, came down to 4.0% in 2004 (Table 3). In the EU-15, the share in total export of agricultural products is 9.5%, in the United States, it is 9.9% (WTO 2005).

When the agricultural products processing industries improve, of course the structure of export for agricultural products should changes in favour of processed products. Depending on this type of changes, market contribution of agriculture would increase, the industrial sector would improve and the exports diversify and contribute supply of more processed products for higher and more stabilized foreign currency income (Güneş 1991). In addition to this, the main reasons of the change in the structure of the exports would be the international agreements, changes related with the consumer demands, food law and legal arrangements concerning the quality and standards. Some other additional reasons related to both of the agricultural sector and agribusiness are the improvement of contracted farming and the application of quality management systems (such as the HACCP, ISO Standards), joint ventures between firms, new marketing techniques and new products (Ekşi et al. 2005). In addition, new developments and facilities in the import of equipment's and aiding materials which are used in agribusiness, as a result of the Custom Union with the EU, has caused to get new and modern capacities in the sector (Ağcakaya et al. 2004).

Table 3. The share of agriculture sector in the total exports, in millions of USD

	Total exports (1)	Exports of agricultural products (2)	Share in total exports (2/1 × 100) (%)	Exports of processed agricultural products (3)	Share in total exports (3/1*100) (%)	Total agricultural exports (2 + 3 = 4)	Share of agricultural products in total exports (4/1 × 100) (%)
1994	18 105.9	2 301.4	12.7	8 770.0	48.4	11 071.4	61.1
1995	21 637.0	2 133.2	9.9	11 055.8	51.1	13 189.0	61.0
1996	23 224.5	2 454.7	10.6	11 357.5	48.9	13 812.2	59.4
1997	26 244.7	2 679.1	10.2	13 000.3	49.5	15 679.4	59.7
1998	26 974.0	2 699.7	10.0	13 143.7	48.7	15 843.4	58.7
1999	26 587.2	2 394.2	9.0	12 068.1	45.4	14 462.3	54.4
2000	27 774.9	1 973.3	7.1	12 152.9	43.8	14 126.2	50.8
2001	31 334.2	2 234.2	7.1	12 782.5	40.8	15 016.7	47.9
2002	36 059.1	1 743.9	4.8	14 763.7	40.9	16 507.6	45.8
2003	47 252.8	2 104.7	4.4	18 533.5	39.2	20 638.2	43.6
2004	63 120.9	2 525.8	4.0	21 754.8	34.4	24 280.6	38.4

Source: SPO (various years), Turkey Main Economic Indicators, Ankara

AGRIBUSINESS IN TURKISH INDUSTRY SECTOR

The Turkish manufacturing industry has the major share in total industrial production value. The share of manufacturing within total industrial production value between 1994 and 2004 was around 84 per cent. Agribusiness takes place within the manufacturing industry and makes important contributions to it. During the 1994–2004, the share of agribusiness in manufacturing realized around 50–60% and it followed a fluctuating course (Table 4). It can express

Table 4. The share of agribusiness in production of manufacturing industry, at 1987 constant prices

	Production of total industry, in billions of Tl (1)	Production of manufacturing industry, in billions of Tl (2)	Share of manufacturing industry in total industry production (2/1 × 100) (%)	Production of agribusiness, in billions of Tl (3)	Share of agribusiness in production of manufacturing industry (3/2 × 100) (%)
1994	24 775	20 473	82.6	12 503	61.0
1995	27 766	23 321	84.0	13 704	58.8
1996	29 743	24 980	84.0	13 417	53.7
1997	32 835	27 839	84.8	16 121	57.9
1998	33 494	28 166	84.1	14 034	49.8
1999	31 814	26 569	83.5	11 946	45.0
2000	33 738	28 278	83.8	12 987	45.9
2001	31 207	25 974	83.2	15 891	61.2
2002	34 142	28 678	84.0	16 196	56.5
2003	36 793	31 140	84.6	16 178	52.0
2004	40 234	34 285	85.2	12 026	35.0

Sources: 1-SPO (2004), Economic and Social Indicators (1950–2003). Ankara; 2-SIS (various years), Manufacturing Industry (Quarterly) Employment, Payments, Production and Tendencies, Ankara; 3-SIS (various years), Statistical Yearbook of Turkey, Ankara that the fluctuation in the production of agribusiness occurred mainly because of the specific characteristics of agricultural sector and the economic considerations.

Within the studied period, the number of firms in agribusiness increased by 34.4% compared to the beginning of the period. The sub-sectors that have the highest number of firms in agribusiness are food/beverages and textile industries. Investment encouraging licenses are mostly given to textile and food among the agribusiness (Güneş 2001). This has affected increasing of the number of firms in both sectors. The rate of increase is about 37.8% for textile, and 61.2% for food/beverages industry (Table 5). Despite the relatively low share in the total number of firms, leather industry is the sector with the highest increase in the studied period. The rate of increase is 272.2%t.

The two leading sectors are food/beverages and textile industries in the production value of agribusiness during the studied period. The production value of food/beverages sub-sector shows a tendency for increase compared to the beginning of the term. Leather industry has reached very high rates of increase between the beginning and the end of the period. However, the share of this sub sector in the production value of agribusiness is quite low (Table 6). When food-beverage and leather-textile industries are together, these industries appear to have an important place within agribusiness.

Agribusiness export generally increased by 122.8% between the years of 1994–2004. Textile industry is observed as the locomotive of export. It follows food/beverages sectors. Compared to the beginning of the period, textile industry export has increased by 133.8% and food-beverages industry export has

Table 5. Number of establishments in agribusiness (number) and change between 1994–2004 (%)

Sub sectors	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Change between 1994–2004 (%)
Food and beverages	356	345	354	527	461	395	406	401	573	569	574	61.2
Tobacco	23	22	20	20	16	12	12	11	20	19	19	–17.4
Textiles*	317	349	353	388	363	337	354	363	431	440	437	37.8
Leather	18	20	21	65	62	58	54	54	65	66	67	272.2
Paper	69	69	70	79	75	71	77	89	101	99	117	69.6
Products of wood	116	122	120	73	68	62	62	58	64	66	78	–32.8
Total	961	985	996	1 207	1 088	966	1 000	1 013	1 254	1 259	1 292	34.4

*Except of Clothing Sub Sector

Sources: 1- SIS (various years), Manufacturing Industry (Quarterly) Employment, Payments, Production and Tendencies, Ankara; 2- SIS (various years), Statistical Yearbook of Turkey, Ankara

Table 6. The value of production in agribusiness by sub sectors, at 1987 constant prices, in billions of Tl

Sub sectors	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Food and beverages	5 271	5 639	6 204	8 096	7 092	6 088	6 362	6 321	7 514	7 901	5 738
Tobacco	1 274	1 150	971	1 285	925	565	649	1 024	1 836	1 854	1 385
Textiles	4 609	5 118	4 808	5 153	4 520	3 888	4 453	6 756	5 181	4 826	3 626
Leather	58	58	61	284	260	236	286	295	245	244	191
Paper	951	1 241	808	960	891	821	845	1 188	1 069	987	739
Products of wood	340	498	565	343	346	348	392	307	351	366	347
Total	12 503	13 704	13 417	16 121	14 034	11 946	12 987	15 891	16 196	16 178	12 026

Source: 1-SIS (various years), Manufacturing Industry (Quarterly) Employment, Payments, Production and Tendencies, Ankara; 2-SIS (various years), Statistical Yearbook of Turkey, Ankara

Table 7. The exports of agribusiness by sub-sectors (ISIC, Rev. 3), in millions of USD

Sub sectors	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Change between 1994/2004 (%)
Food and beverages	1 727.7	2 063.4	2 193.8	2 454.3	2 057.0	1 744.0	1 835.5	2 016.2	1 880.7	2 649.6	3 349.4	93.8
Tobacco	38.4	141.3	102.2	123.8	84.1	96.4	123.1	81.1	99.7	89.8	78.0	103.1
Textile*	3 419.5	4 108.6	4 564.7	5 353.9	5 920.6	5 687.2	4 614.1	4 943.5	5 532.8	6 841.2	7 998.1	133.8
Leather	215.7	180.4	220.9	299.2	271.5	180.9	189.5	211.8	214.2	285.8	328.0	52.1
Products of wood	61.0	68.8	68.8	75.1	70.8	68.5	63.0	109.4	118.5	146.0	203.7	233.9
Paper	108.0	125.5	125.7	154.2	150.0	148.7	164.3	241.7	302.6	367.2	457.4	323.5
Total	5 570.3	6 688.0	7 276.1	8 460.5	8 554.0	7 925.7	6 989.5	7 603.7	8 148.5	10 379.6	12 414.6	122.8

*Except of Clothing Sub Sector

Source: SPO (various years), Turkey Main Economic Indicators, Ankara

gone up by 93.8%. Although the increase in paper and wood industries is much higher than the one in those two sectors, their relative contribution to the total export is quite low (Table 7).

CONCLUSION

Agricultural sector has been contributing to the economic development in Turkey. About 30% of the agricultural products turn into half-processed and processed products in agribusiness (Orhan 1995). In times of the crises on the global and national level that Turkish economy has come through, the sector was influenced in a negative way concerning the value of production. There have also been important developments in agribusiness in terms of the number of firms, production and export. The locomotive sub-sectors of the Turkish agribusiness are textile-leather and food-beverage industries. However, neither the compelling effect of agribusiness over agricultural sector towards development, nor the regressive effect of agricultural sector over agribusiness can realize thoroughly. The reason for this is the weakness of the integration between agriculture and agribusiness sectors. Broken productions and the lack of technological co-operation prevent the development (Bülbül et al. 1996; Emiroğlu 2000). This situation actually limits the development of both agribusiness and agricultural sector and agribusiness cannot become effective enough to move the inner dynamics of the agriculture sector. However, the Turkish agribusiness sector has the capacity that can be a way-out for many problems related to the agriculture sector. Furthermore, when agribusiness performs its functions, the burden over the state regarding agriculture will diminish and it will be possible for the state to carry out the agricultural policies in a better way (Özçelik, Paksoy 2002). For this reason, the main policy behind the realization of the present potential of agribusiness should be towards the development of an efficient integration between agricultural sector and agribusiness.

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