

AGRICULTURE PROSPECTS

Sector Overview

Turkey is a significant agricultural exporter. In fruit and vegetables in particular, it is a major world producer and net exporter. Its levels of production currently amount to around 40% and 20% of EU-25 production of fruit and vegetables respectively. In the arable crops it is a major producer (in EU terms) and for other crops it is a competitive producer (in EU and world terms) of certain grain legumes such as chickpeas and lentils, of cotton, and of some qualities of tobacco and olive oil.

Agriculture is of key importance to Turkey, both in social and economic terms. Agriculture's share in the Turkish economy and employment is many times greater than the EU average:

- About 39 million hectares are devoted to agriculture. This represents 23% of the EU-25 agricultural area. Turkey has a far richer endowment of agricultural resources in terms of cultivable land and availability of water than any Middle Eastern country.
- Roughly one third of the workforce is employed in the agriculture.
- The sector represented 11.6% of GNP in current prices in 2004.

However, as the country has developed, agriculture has declined in importance relative to industry and services. While the share of agriculture in national income was 26% in 1980, this rate declined to 17% in 1990 and to an estimated 11.6% in 2005. Forecasts prepared by the Turkish authorities foresee the share of agriculture in GDP continuing to decline in the periods ahead, down to 10.2% in 2008.

The share of agriculture in total civilian employment has also decreased - from 50% in the beginning of 1980s to about 30% in recent years. In the last 20 years, while overall GNP was growing at around 5% per year, agriculture grew at about a third of that rate. In the period 2006-08, the Turkish authorities expect that value added in agriculture will grow between 1.5-2.2% per year, while the GDP will grow an average 5% per year.

Structural Issues

Agricultural areas have a fragmented structure and agricultural holdings are generally in the form of family enterprises.

The latest (2001) Agriculture Census indicates that there are approximately 3.1 million agricultural holdings. The number decreased by 25% over the ten years between 1991 and 2001. There has been a reduction of around one million in the number of agricultural holdings since the previous agriculture census of 1991. Thus, the average size of the areas possessed by the agricultural holdings rose to 6 hectares compared to average 5.4 hectares of the previous census. This average size of 6 hectares is well below the EU average that is 16.5 hectares per enterprise. The size of the areas possessed by the 66% of all agricultural holdings is less than 5 hectares. Only 6% of holdings are larger than 20 ha.

Subsistence and semi-subsistence farming is an important characteristic of the Turkish agriculture, as is the case in certain regions of the current EU and in Bulgaria and Romania. These farms are typically characterized by productivity being low and only a

small fraction of production being marketed. Land together with labor stems as the major divergence from the EU averages.

COMPARISON OF SELECTED AGRICULTURAL VALUES, 2001		
Item	Turkey	EU
Agricultural area (000 ha)	27,000	134,000
Agricultural establishments (000)	4,106	7,370
Average size of establishments (ha)	5,9	17,4
Total population (million)	68	377
Agricultural population (million)	20	15.6
Employed in agriculture (million)	9.4	7.4
Agriculture's share in total employment (%)	39	5
Agriculture's share in GNP (%)	14	1.9
Agriculture's share in exports (%)	7.8	7.5
Agriculture's share in imports (%)	4.2	10.5

Source: Ministry of Agriculture

Market Size

Agricultural output has expanded over a period of several decades, with minor dips in some years as a result of drought or other factors. The output has ranged between \$40-43 billion in recent years. The bulk is accounted by plant products (67% in 2005). According to the Food and Agriculture Organisation of the United Nations, Turkey ranks among the top 10 countries in terms of vegetable and fruit production per capita as well as total output.

AGRICULTURAL PRODUCTION, 2003-05					
YTL million, at 1998 prices					
	2003	2004	2005 e	Annual Growth, %	
				2004	2005
Plant products	7,186	7,373	7,481	2.6	1.5
Livestock	2,726	2,812	2,912	3.1	3.6
Forestry	280	292	292	4.4	-
Fishery	350	392	412	12.0	5.0
<i>Total</i>	<i>10,543</i>	<i>10,870</i>	<i>11,098</i>	<i>3.1</i>	<i>2.1</i>
<i>Total (\$ billion)</i>	<i>40.4</i>	<i>42.4</i>	<i>43.0</i>		

Source: State Planning Organisation (SPO)

Turkey's great advantage is the conjunction of ample land with a variety of climatic conditions. All temperate-zone and Mediterranean climate crops can be grown in the country, as can a number of subtropical crops.

Livestock farming is generally a small-scale family farm activity. Only 2% of farms are specialized in animal husbandry. Consumption figures for meat per head is only about one-fifth of the EU average and for cow milk and eggs are at about half the EU level and three quarters the EU level, respectively.

Cereal production occupies almost three quarters of Turkey's total cultivated area and is the most widespread farming activity. In 2001, for example, the area devoted to

cereals (not including rice) was 13.8 million hectares, which represents 26% of the EU-25 total for the same year. The bulk of this is wheat and barley. Wheat occupies first place in terms of its economic importance and the amount of area sown, while lentils have the highest share of food pulses. Cereal yields on the other hand (with the exception of rice) are generally low (around 2 tonnes per hectare for wheat).

Fruits constitute about 25% of total agricultural production in value terms. In 2004, fresh fruit production totaled 14 million tonnes. Grapes ranked first with 3.5 million tonnes, followed by citrus fruits and apple.

AGRICULTURAL PRODUCTION, 2003-05					
Products	2003		2004		2005 e
	000 tonnes	YTL million	000 tonnes	Share in total, % (in value)	
CEREALS	28,907	1,408	31,959	21.2	32,478
Wheat	17,100	892	18,900		18,900
Rye	8,100	305	9,000		9,000
Maize	2,800	142	3,000		3,500
Rice	372	48	490		525
Others	535	21	469		553
PULSES	1,552	189	1,578	2.6	1,552
OTHER CROPS	29,470	1,698	29,842	23.4	29,987
Cotton	2,346	403	2,390		2,455
Tobacco	112	106	157		141
Sugar beet	12,623	211	13,517		14,299
Potato	5,300	336	4,800		4,200
Sunflower	800	148	900		950
Others	8,290	491	8,078		7,942
FRUITS	14,002	1,766	14,064	23.7	14,467
Citrus	2,488	226	2,708		2,588
Apple	2,600	186	2,100		2,550
Grapes	3,600	419	3,500		3,650
Olive	850	135	1,600		850
Hazelnut	480	214	350		500
Tea	869	88	1,105		1,000
Others	3,115	495	2,701		3,329
VEGETABLES	18,137	1,269	17,641	16.7	17,929
OTHERS	-	590	-	8.4	
FLOWERS	-	264	-	3.9	
<i>Total</i>		<i>7,186</i>	-	<i>100</i>	-

Source: SPO

Foreign Trade

Although Turkey is a net food exporter, imports of agricultural products have been growing at a faster rate than exports since the mid-1980s, which mark the start of import liberalization. Agricultural imports were 5% of total imports, and the agriculture sector experienced a trade deficit of \$121 million in 2004.

TRADE BALANCE IN AGRICULTURE, 1999-04			
\$ million			
Year	Export	Import	Balance
1999	2,094	1,655	439
2000	1,683	2,129	-446
2001	2,005	1,413	592
2002	1,805	1,707	98
2003	2,200	2,537	-337
2004	2,644	2,765	-121

Source: Turkstat

Agricultural imports, which totaled a mere \$51 million in 1980 rose to \$1 billion for the first time in 1989 and then registered a steady increase (except during the 1991 and 1994 crises) to reach a record \$3 billion in 1997. Imports have since fallen to just over half this number, rising to approximately \$2.7 billion again in 2004. The growth in imports was almost exclusively due to the imports of industrial crops, and in particular, oil seeds. Oil seeds accounted one third of total agricultural imports in recent years, followed by cereals and cotton.

BREAKDOWN OF AGRICULTURAL FOREIGN TRADE, 2003-05					
000 YTL, at 1998 prices					
	2003	2004	2005 e	Growth (%)	
				2003	2004
EXPORTS	724,898	668,876	697,559	-7.7	4.3
Plant products	678,112	624,896	653,421	-7.8	4.6
Livestock	21,589	12,954	10,353	-40.0	-20.1
Forestry	4,200	4,211	4,213	0.3	-
Fishery	20,997	26,815	29,572	27.7	10.3
IMPORTS	742.211	719,803	716,910	-3.0	-0.4
Plant products	680,156	628,692	624,845	-7.6	-0.6
Livestock	13,854	14,464	14,319	4.4	-1.0
Forestry	47,570	74,601	47,601	56.8	-
Fishery	631	2,046	3,145	224.2	53.7

Source: SPO

Turkey has consistently been an exporter of agricultural products. The sector has also become an important resource base for many export-oriented industries; the share of agro industrial products in total exports is around 6%. Main export items are fresh fruit and vegetables, which accounts for around 45% of all Turkey's agricultural exports. The shares of vegetable oils and confectionary and chocolate products are increasing in the total exports. Agriculture contributes between 8-10% to Turkey's overall exports, serving as one of the pillars of the economy.

FOREIGN TRADE OF CROPS, 2003-05			
000 Tonnes			
	2003	2004	2005 e
IMPORTS			
Wheat	1,806	1,037	550
Maize	1,817	1,049	500
Sunflower	381	479	500
Tobacco	46	43	45
Cotton	554	585	595
Cacao	60	69	75
Coffee	11	12	13
EXPORTS			
Chickpea	217	170	180
Potato	177	155	150
Hazelnut	140	134	136
Dried fig	42	37	40
Grape	99	159	150
Tobacco	113	108	110
Cotton	89	48	55
Onion	132	68	110
Citrus fruits	636	686	705
Tomato	239	235	237
<i>Source: SPO</i>			

The EU is the major trading partner regarding the agricultural products, but Turkey also has important trade relations (and a trade surplus) with other countries in the Mediterranean basin and the Gulf region. While 45% of total agricultural exports are made to the EU, this ratio decreases to 25% in the case of imports.

Heading for the EU Common Agricultural Policy

Agriculture has great potential for further development. Being restructured and reoriented towards increased competitiveness through IMF and EU supported programs, agriculture holds the promise of making Turkey a major player in EU and world terms. The comprehensive agricultural reform being implemented since 2000 creates a more competitive agricultural sector and reduces state involvement. The World Bank contributes to these projects under a \$600 million Agricultural Reform Implementation Project (ARIP).

Turkey is reshaping its agriculture in preparation for the EU membership as well as in line with its commitments to the IMF:

- ✓ The agricultural reform programme puts emphasis on the creation of a rural development strategy aimed at modernization of subsistence and semi-subsistence farming, leading the way to commercially viable entities. Recent years saw several larger Turkish companies entering the livestock sector with ambitious projects in various regions of Turkey. .
- ✓ Harmonization of the Turkish agriculture with the CAP (Common Agricultural Policy) is a priority in the Turkey-EU relations. Turkey has to adopt 17 laws, 211 regulations and circulars to adjust its agricultural system with that of the EU.

Restructuring in agriculture is much more than a simple reform, rather it is a long process. Turkey's farmers would receive an assumed figure of approximately \$11 billion in subsidies annually under the Common Agricultural Policy (CAP). Due to similarities between Poland and Turkey in this area, it is likely that the model the EU developed for Poland will be adapted to Turkish agriculture. The most important item during negotiations between Turkey and the EU will be the application of EU production standards. Jerzy Plewa, Poland's chief agricultural negotiator during its accession to the EU, who is advising the Turkish Ministry of Agriculture on the accession process said: *“Polish experience shows that the EU's CAP offers many new opportunities to farmers and rural people. Improved levels of competitiveness, increases in average farm size and income and improvements to the quality of life of rural people were all benefits of the possibilities opened up by the CAP.”*

The restructuring and alignment works continue mainly in the following areas:

- The agricultural population will be reduced from current 33% to close to the EU average.
- Ministry of Agriculture is working on a new strategy for 2006-2010, backed by World Bank credits. The government plans to allocate 1% of GNP to agricultural support each year (compared to 0.7% in the 2005 budget). The strategy will equip Turkey with sophisticated policy instruments.
- As stated in pre-accession economic programs, Turkey set the following targets for the agriculture:
 - Short-range: Modernization of land register system, food controls, and animal and plant health services.
 - Middle range: Setting agricultural and rural development projects, increasing food processing institutions, hygiene, public health and food health test institutions.
 - Long range: Determining quotas and credits and donations from the European Union budget.

Livestock farming

This is generally a small-scale family farm activity. Red meat and dairy sectors are expected to grow in the coming years, meeting the EU's strict veterinary standards.

The Turkish agriculture and livestock sector is embedded with high production cost and low yield. Carcass productivity of cattle is 166 kg and annual milk yield per dairy cow is approximately 2 tons in general. As Feyhan Kalpakcioglu of the Yasar Group points out, foreign know how would help much on lowering the cost of production. Fodder planting is so limited and there is nearly no silage. The majority of the animals is fed mostly by straw and drink insufficient water. Animal care conditions are primitive and unhealthy. Driven by the investments of major capital groups, however, efficient agricultural enterprises are flourishing, while supermarket chains and the food industry are starting to sponsor contract farming and to invest directly in modern livestock farms. Intensive greenhouse farming, horticulture and fish farming may spread from the Mediterranean to the GAP region. As the quality and safety problems

are solved, integration and mergers between agriculture and industry will increase and the sector will achieve rapid growth.

Privatization of Farms

TIGEM, the state farms, opened its medium and smaller size farms to the private sector at end-2001. The first project realized was a joint venture between TIGEM and Dimes (top milk and fruit juice producer) in 2003. The collaboration method was changed to long-term leasing in 2003 in order to circumvent potential problems in connection with the new Public Procurement Law and a tender was opened in July 2003 for the 30-year leasing of 12 public farms. Some foreign firms are known to contact the bidders to discuss collaboration possibilities. The total size of the 22 farms slated for private involvement is 491 million sqm. TIGEM is open to proposals and suggestions from local and foreign investors for all of the state farms. Ceylanpinar in particular is unique in both size and product variety wise with its 180,000 ha. As such, TIGEM farms could offer greater opportunities for foreign investors, especially in contract farming with farmers in the vicinity.

Organic Agriculture

Turkey boasts the largest organically grown area in the Mediterranean region. Although organic agriculture has a small share (about \$50 million) in Turkey, it is an open market for development. The impressive advantage it has is that organic agriculture can easily be applied with low cost in the country. Over 100,000 ha have been allocated for this purpose. Organic production is expected to increase its share in agricultural production from 0.2% currently to 2% during the EU accession process.

The sector has completed the necessary regulations; the Organic Agriculture Law was enacted in December 2004, being modeled on the EU's. Organic agricultural production, which was first carried out through contract farming in Turkey, is now supported by projects of independent and non-governmental organizations as well. Generous investment incentives have already been announced. The anti-personnel land-mines in the border region between Turkey and Syria are planned to be swept and a field of 55,000 acres to be opened to organic agriculture.

Investors mainly from France, United Kingdom and the Netherlands have been seeking investment opportunities in organic agriculture in various regions of Turkey – fruit and vegetable in the Aegean and Mediterranean, husbandry and fodders in South Anatolia, pulses in the Central Anatolia and olive and olive oil in the Aegean regions. Several Israeli companies are said to have initiated organic farming studies in the GAP area, where there are major irrigation systems. Germany has recently offered to farm organically in the Troy Historical National Park near Canakkale and export the vegetables produced there to European Union countries.

GAP – Gateway to the \$200 billion market

When completed, GAP (The Southeastern Anatolia Project), Turkey's largest regional development scheme, will make the region a major exporter of a wide variety of agricultural products. Its exports rose from \$427 million in 1994 to \$1.9 billion in 2005. Considering that it is a gateway to the Middle East market which represents an import market of over \$200 billion, the project offers much to the investors

It covers an area roughly the size of Austria and hosts over an estimated 7 million inhabitants. The project has an investment cost of \$32 billion, of which over \$17.8 billion was realized as of beginning of 2006. The project needs \$8 billion only for irrigation investments and offers profitable opportunities for investors in this field. The Sanliurfa-Gaziantep highway of 196 km is planned to be completed soon, linking the region to the Mediterranean ports.

The implication of this project for trade relations includes the following:

- ✓ Cotton is abundantly available. Although only a small portion of the irrigation projects have been completed in the GAP, cotton comprised nearly 50% of Turkey's total cotton production.
- ✓ The region presents unprecedented advantages for organic agriculture and hence for organic textile.
- ✓ The region is an excellent location for the food and beverages manufacturing industries. The irrigable area, projected to increase from 120,000 ha to 1.7 million ha in 2010, lends itself for growing five products in two seasons. Availability of cheap and experienced manufacturing workers growing 3% annually and 38% cheaper than those of a comparable business practice in developed regions of Turkey.
- ✓ The trend toward establishment of large agricultural enterprises operating on commercial terms is more evident in the GAP. As such, the GAP region will open up a large market for: irrigation equipment; transport vehicles; specialized agricultural machinery; and operation, maintenance, and management services of the irrigation systems. Promising opportunities will arise in storing, sorting, and packaging facilities.

Prospects

The pursuit of agricultural reforms will create profitable opportunities for the initiation of new projects for foreign as well as local investors:

- In the longer term Turkish accession can be expected to lead to **an increase of trade** in both directions as the EU membership would mean an end to the protectionist measures against EU products. Meanwhile, in agriculture and processed agricultural products, Turkey has been making reductions and amendments in its annual import regimes as per its WTO commitments. Agreements to cut domestic subsidies and end export subsidies (particularly in the developed countries) could eventually create a more level playing field for Turkey in export markets as well as reduced import tariffs will increase competition from imports.
- The reform program puts emphasis on the modernization of subsistence and semi-subsistence farming, leading the way to **commercially viable entities**. Farms will tend to get larger, modern methods will be adopted and yields will go up. Turkey is expected to merge divided landholdings, much as in Poland, to pave the way for more efficient land use and organized agriculture. Various rural development projects have been carried out and many are on the agenda.

- Turkey has the capacity to become **a major player in the EU agriculture** as its production potential for some sectors is significant. It is a major player in fruit and vegetable market, turning out 40 % and 20 %t respectively of current EU-25 output. It is the world's top producer of apricots, cherries, figs, quinces and hazelnuts, of which it is also the largest exporter.
- Turkey would be **a well-located supplier** for markets usually dominated by EU producers. The country's proximity to Europe, the Middle East and North Africa already gives it easy access to large markets through the Black Sea to the north, the Aegean Sea to the west and the Mediterranean Sea to the south.
- Likewise, Turkey's **internal market**, which is characterized by high rates of population growth and growing income per capita, as well as the changing demand patterns of the new generations should also experience rapid growth in demand for more food of higher quality. The agroindustry is developing fast in volume as well as in product variety and quality.

WHY INVEST IN AGRICULTURE NOW?

Feyhan Kalpakcioglu, CEO of Yasar Group, regards impact of the EU on the Turkish agroindustry very positive. She says the accession requires alignment in animal and plant health, farm registration, food hygiene and controls and that is why it is the right time for such collaborations, Ms Kalpakcioglu draws attention to the upgrading and managerial requirements of the industry:

- “The integration process with the EU will force consumption of packaged food products subject to hygienic processes. The figures in Turkish food industry indicate the potential we have:
 - ✓ \$72 billion p.a. worth of food production
 - ✓ Only 15% of production is packed.
- In the dairy and meat sector, the major issue is to improve the quality and quantity of raw material. Only 20 % of milk production has a registered status, reaching the modern processing industry. The upgrading requirement in the dairy sector will lead small dairies to possible partnerships with other companies. Foreign direct investment could play an important role in diffusing new technologies in rural areas. An upgrade of the training and advisory services in agriculture is crucial to support farmers in the new, more market oriented environment with advise on appropriate cropping patterns, new farming technologies, and the improvement of marketing practices.
- Leasing of the state farms could be another opportunity for further co-operation with foreign companies.
- The other promising areas for co-operation could be land and animal registration, environment and animal health protection and food safety.”

The Izmir based Yasar Group has a vertically integrated agrobusiness organization; operating feed mill, hatcheries, breeder units, livestock husbandry and fish farming and processing plants.

Ethem Sancak, CEO of the Sancak Group of companies, puts emphasis on the timing: “When the prices decline with the EU accession, only those with lower cost will survive and there will be ample opportunity for them to exploit”. His other arguments are as follows:

- Dairy market is untapped to a great extent and, with 20% net profit rate poses great opportunities for investors. Turkey needs to increase its registered production urgently considering that about 80% of total milk production of 10 million tons does not reach to the processors. This is an issue which deserves urgent action as only the registered production amount will be taken into account in determining the country production quotas of the EU members.

Further, small scale dairy units scattered all over the country lead to formidable collection cost for the processors, which would greatly appreciate to work with larger farms. Pinar Dairy of the Yasar Group, for example, is collecting milk from 20,000 farms.

- Protected by high customs duties, sale prices of meat are two fold of that in the EU – €3.0 /kg. The government is currently working on easing the ban on breeder imports and putting into practice the incentives geared towards larger and commercially viable farms.

The Sancak Group, which controls over half of the pharmaceutical wholesale activities with its 50% stake in Hedef Alliance, a partnership with Allied Unichem of London, is currently developing projects in various regions of the country and interested in partnering with foreign companies with expertise in farm management in existing and potential projects.