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Turkey

Grain and Feed Annual

Turkey Grain and Feed Annual 2012

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Report Highlights:
Post forecasts 17.5 MMT of wheat, 7 MMT of barley, 4.2 MMT of corn and 750,000 MT of paddy rice production in Turkey in MY 2012. New investments in the livestock industry increased demand for high protein grains. Turkey became the largest wheat flour exporter in the world.

Executive Summary:

Post forecasted 17.5 MMT of wheat production and a planting area of 7.82 Million ha. The slight area increase was due to a switch from cotton planting to wheat. Due to price shocks in the cotton sector, farmers preferred to grow either wheat or corn in most regions in MY 2012. More over sunflower area increase is also very important facts for Konya region in MY 2012.

Low yields, low quality and low prices led to a 10% decrease in the durum wheat area in Konya region. The corn area in some regions increased at the expense of wheat area.

Turkey had one of the coldest winters in recent history. These cold weather conditions and heavy snowfall had negative effect on wheat in Afyon. Corum, Kirikkale, Polatli some part of Konya and the Kirklareli region. Winter kill was very effective in Central Anatolia region.

The barley area increased in Konya, Corum and the Kirsehir region. A high barley price led wheat farmers to grow barley instead of wheat. The other important area for barley is the GAP region. Production in this area remained the same. Post forecasts barley area at 3.3 million ha and production at 7 MMT.

In MY 2011, cotton farmers couldn't find enough seeds to plant and even went to cotton ginning premises to collect seeds. Similarly, in MY 2012 farmers demand for corn seed was higher than expected, and global and local seed companies are almost out of corn seed stocks. The corn area could reach 520,000 ha, depending on second season corn area, but corn area is conservatively forecasted at 505,000 MT and production at 4.2 MMT in MY 2012. Some traders even forecasted corn around at 5.5 MMT. Post would like to emphasize that there will be record corn production in 2012.

Rice production was at a record level in MY 2011 and estimated at 750,000 MT. Rice area increased in the Gonen, Manyas and Thrace regions. Osmancik variety now dominates the whole area (87% of total seed). For MY 2012, post forecasts paddy rice production at 770,000 MT.

Commodities:

Wheat
Rice
Corn
Lentils

Production:

Wheat

Post forecasts 17.5 MMT of wheat production and 7.82 Million ha. There is a slight planting area increase because of gains from cotton area. In MY 2011, cotton area increased at the expense of the wheat area but due to subsequent price shocks in the cotton sector, many farmers decided to grow either wheat or corn in MY 2012.

Cukurova region

In the Cukurova region (Adana, Mersin, Osmaniye) the wheat area increased 3.8% compared to MY 2011 but decreased 13% in MY 2012 compared to MY 2010. Most of the removed area was allocated for corn instead, and some for sunflower and cotton. In this region in particular, farmers had a difficult time deciding between corn and cotton production. Corn is profitable in terms of high yields, low cost, ready buyers and relatively high prices. Cotton is profitable due to record high prices and a government subsidy (420 TL/MT).

In MY 2011, there was a rush to purchase cotton seed due to incredibly high cotton prices. In MY 2012, a similar rush occurred for purchasing corn seed. The government was late announcing 2012 commodity premium. Farmers have already decided on either planting corn, cotton, oilseed plants or forage crops. The government premium has been a very important factor in farmers' planting decisions. In the past two years, the government made a point of announcing premiums in time to influence planting decisions but in MY 2012, farmers had to decide on crops according to market conditions or anticipated premiums because premiums were announced later.

Wheat plant height was 20 cm in March 21, 2012 and development was good. In some areas there were yellow colors observed in the wheat field. If there is enough April rain yields will be around 550-600 kg/da. In MY 2011, a 700 kg/da wheat yield was observed in the Karatas region. In MY 2012, yields will not be at record levels but will be higher than the long term average yield.

Corn planting started on March 25, 2012 which is 15 days late for first season corn planting. There are five corn starch companies and three of them are located in Adana. They buy GMO free corn domestically. The other major user of corn is the feed sector. Farmers are following the decisions of the Biosafety Boards on biotech corn approvals very closely and are concerned that the events will soon be rejected on the basis of some very negative risk assessment committee reports. A rejection will deny the feed industry the ability to resume corn imports. The poultry industry benefitted from high feed type wheat yields in MY 2011 as well as a flexible inward process regime for wheat which ensured affordable wheat imports. As a result the poultry industry's dependence on corn production decreased temporarily, but in May and June 2012 when wheat is first harvested, poultry producers will have to compete with other users and prices may increase.

In the relatively high areas of Cukurova, farmers also planted sunflower, taking additional acreage from wheat. The sunflower area is increasing every year in the region because of its low production cost, high yield and high government premium (230 TL/MT). Ten years ago the sunflower area in the region was almost zero and today it is 5,000 ha.

Corn oil consumption dropped suddenly and dramatically after biotech corn discussion started and demand to sunflower seed increased. There are some companies who takes the initiative to increase sunflower area in the East part of Turkey which will negatively affect low quality wheat area in the future in the region.

Another competitive product in Cukurova is soybeans, however despite a high government premium (500 TL/ha) for soybeans, acreage increased only a little and will not have a significant impact on wheat or corn area. There

are very little or no initiatives by the poultry industry to increase soybean area in the region. Even if farmers wanted to plant soybeans, there is not enough soybean seed availability, especially as a result of increasingly strict import regulations and implementations after biosafety law.

There are some farmers who began to plant canola in the Cukurova region. Yield and premium supports were very favorable towards Canola production but farmers need some time to adjust. Harvesting equipments and canola farming knowledge are two main factors that will determine the future area of canola in the region.

Orchard development, greenhouse plants, sesame seeds, onions and watermelons increase their share of farm area every year in the region.

There is one big irrigation project in the region called Yedigoze dam which will irrigate 75,000 ha of land in the Imamoglu Valley. Farmers in the region will switch from wheat to first season corn and cotton. The project will be finished in 2014.

The government sets targets for every sector up to 2023. In terms of agriculture, Adana agriculture will be much different in 2023 than today. Orchard areas will increase, both for citrus and stone fruit. Corn and Cotton will be the dominant crops for the first season crop. Sunflower and Canola area will increase. High value crops such as greenhouse crops and vegetables will increase.

Future of wheat in the region is a big question mark. Since most milers enjoy to buy first domestic wheat harvest in the region and ready to pay premium, wheat area will always keep some area, but corn, sunflower, cotton and orchard development will always challenge wheat area.

Post do not expect as high yield as MY 2011 but yield in the region will be more than long term average.

Hatay region

The Hatay region was flooded in January and February by extensive rain and opening of a dam door. Almost 15,000 ha of wheat area were badly affected by these floods. Wheat most probably will be replaced by cotton and corn in April 2012. The picture below shows a wheat area in the Hatay region in February 2, 2012. Wheat in the picture was planted after the cotton harvest and most probably they eventually needed to replace wheat with cotton or corn. There will be 100,000-150,000 MT less wheat production in this area compared to MY 2011.

Figure 1: Wheat farm picture from Hatay region

South East Anatolia

There was 10% decrease in wheat planting area in South East Anatolia compared to MY 2011. Heavy rainfall in autumn prevented farmers from harvested second season corn in some regions and some farmers allocated land to cotton planting. Due to availability of direct sunlight in the region, Sanliurfa is known for its high quality durum wheat. Increased pasta exports attracted durum wheat farmers again this year. High barley prices were also led to farmers to increasing the overall barley area. The major problem experienced in the region was late cold weather in March, 2012. Second season corn producers planted wheat in January 2012 and late March cold weather could potentially decrease the effectiveness of fertilizer and may damage some crops.

Very favorable weather conditions allowed South East Anatolia led to improved wheat production in MY 2012, contrary to conditions in other parts of the country. Most of the production increase will go to the pasta and bulgur industry since the region produces the highest quality durum wheat. Considering the overall conditions of wheat in the rest of the country, high quality wheat in the region will attract millers, especially from the Gaziantep region.

Konya region

Winter wheat planting is completed and rainfall and snow coverage was very favorable for plant development. Wheat plant height was 4-5 cm on March 30, 2012. Durum wheat area decreased 10% in favor of barley area. The MY 2011 durum wheat crop in Turkey had protein content problems and therefore farmers couldn't benefit from high world durum prices. Especially in dry areas, barley planting increased around 10-15% compared to MY 2011. Milling wheat was very popular among farmers during MY 2012 planting. The new TMO protein-based procurement policy led farmers to use certified seed, especially in the Konya region. Wheat area decreased 1% compared to MY 2011 due to an increase in corn, sunflower and forage crops. Winter kill was very common problem in Kulu, Cihanbeyli region.

The livestock industry grew significantly in the Konya and Aksaray regions. Turkey imported 85,000 head of breeding dairy cattle, mainly from U.S., since 2009. Most of the cattle are now located in the West, Central

Anatolia and Thrace part of Turkey. These new large farms in the region initiated contracts for forage crops, which resulted in a slight decrease in wheat area.

Ministry of livestock, food and agriculture try to encourage sheep and goat farming in the region due to unavailability of protein source to feed cattle population. Sheep and goat population increased in the region and get back to same number of population before red meat price crisis started in 2009. Ministry believes that Turkish red meat production should come from sheep and goat. They are planning to rent meadows and pasture to small ruminants producers in the future to encourage them to produce more small ruminants.

At the moment there is strong dairy and beef industry settled in Konya, Aksayar and Afyon region and they will need high quality protein sources like Corn, Soybean and forage crops.

The corn area in Eregli regions increased at the expense of some wheat area. Bezostoja is still the leading seed variety in the region. Fertilizer use increased in the region by some farmers due to their increased knowledge about the relationship between fertilizer use and protein content in wheat. Large farmers apply fertilizer three times on wheat fields but most other farmers only apply fertilizer once due to high fertilizer costs. The government provides support in the amount of 47.5 TL/ha for fertilizer purchase. Harsh winter conditions helped Bezostoja variety farmers and negatively affected newly popular Esperia variety farmers.

There are two types of wheat area in the region. One is irrigated land, which is irrigated by wells. Millers usually targets to buy irrigated wheat. In MY 2012, irrigated area do not have any germination or cold weather problem but dry land area experienced germination problem. There will be yield loss in the region in MY 2012.

Table1: Fertilizer price

Turkey: Fertilizer prices						
Type of fertilizer	December 10, 2008 (TL/MT)	December 10, 2009 (TL/MT)	February 10, 2010 (TL/MT)	March 30, 2011 (TL/MT)	January, 2012 (TL/MT)	February 2012 (TL/MT)
Compound fertilizers/ DAP (Diammonium phosphate)	760	670	920	1,350	1,450	1,420
Nitrate fertilizers/ Urea	1,670	585	680	960	1,030	1,080

Polatli region

Farmers in the Polatli region saw high yields and medium level quality in MY 2012. High quality wheat received a premium of 395 USD/MT in March 2012, which encouraged farmers to spread more fertilizer, starting in April 2012. The Esperia seed use, which usually leads to high yields and high quality, increased in the region.
Higher diesel prices also reduced fertilizer and machinery use in wheat farming. The diesel price is currently at a record high of 4 TL/liter (2.25 USD/liter). There is a government support payment of 37.5 TL/ha for diesel purchase for farmers.

Turkey had one of the coldest winters in recent history. Although the cold temperatures and heavy snowfall mostly left wheat unharmed, some damage was observed in Afyon and the Kirklareli region. There was also some damage observed in the Polatli, Golbasi, Haymana, Kirikkale region. Wheat germination was not regular or uniform. Farmers started to spread fertilizer or add irrigation to try to save the wheat. However, Post believes that these measures will not help wheat in Polatli. This cold weather damage is expected to affect 25% of the wheat area in the region. Root problems were also observed.

Farmers usually use 200 kg of seed/ha but most farmers would prefer to use more seed per hectare in order to get a higher yield. To meet this demand, Turkey would need to produce an estimated 650,000 MMT of certified seed/year. Farmers mostly complain about high input costs, including the price for certified seed, which is 630 USD/MT. Farmers in general use around 200 kg/ha fertilizer for wheat farming.

Table 2 : Government support to wheat farmers

Turkey: Government support to wheat producers					
Year	Certified seed (TL/ha)	Soil analysis (TL/ha)	Premium payment (TL/MT)	Diesel (TL/ha)	Fertilizer (TL/ha)
2005	50	-	-	24	16
2006	50	10	30	-	-
2007	50	10	35	28.8	21.3
2008	45	10	40	28.8	21.3
2009	50	22.5	45	29.3	38.3
2010	50	25	50	32.5	42.5
2011	60	25	50	37.5	47.5
2012	60	25	50	40	50

Table 3: Wheat production estimate and forecast

Turkey: Wheat production and yield										
Regions	MY 2010 Avg.yield (MT/HA)	MY 2011 Avg.yield (MT/HA)	Long term Avg.yield (MT/HA)	Harvest Time	MY 2010		MY 2011		MY 2012	
					Harvested Area (ha)	Production (MT)	Harvested Area (ha)	Production (MT)	Harvested Area (ha)	Production (MT)
Cukurova region	3.5-4.5	4.7	4.5-5.5	May 10-June 10	300,000	1,300,000	250,000	1,175,000	260,000	1,250,000
Hatay region	3	4.7	5-5.5	May 25-June 25	100,000	300,000	85,000	399,500	85,000	260,000
Southeast region	2	2.9	3-3.5	May 15-June 25	1,000,000	2,000,000	800,000	2,320,000	900,000	2,300,000
Central Anatolia	2	2.38	1.5-2	June 25-July 25	3,000,000	6,000,000	3,000,000	7,140,000	2,990,000	6,300,000
Polatli	2.8-3	3.4	3.3	June 15-July 20	120,000	350,000	130,000	442,000	130,000	350,000
Aegean	2-2.5	3	3	May	650,00	1,500,00	550,00	1,650,00	550,00	1,600,00

region				25-June 25	0	0	0	0	0	0
Aydin region	4.5	4	4	May 20-June 10	8,000	50,000	6,000	24,000	6,000	40,000
Thrace	3.5	4.1	4.1	June 15-July 15	600,000	2,500,000	600,000	2,460,000	600,000	2,400,000
Other regions	1.3	1.4	1.5	June 15-July 15	2,222,222	3,000,000	2,300,000	3,220,000	2,300,000	3,000,000
Total	2.12	2.3	2.3	My 15-July15	8,000,222	17,000,000	7,721,000	18,830,500	7,821,000	17,500,000

Barley

The barley area increased in the Konya, Corum and Kirsehir regions. A high barley price led to wheat farmers planting barley instead of wheat. In another important area for barley, the GAP region, the area remained the same. Post forecasts barley area at 3.3 million ha and production at 7 MMT in MY 2012.

Corn

High soybean and cotton premiums in MY 2012 will not be enough to attract farmers to grow more of these crops. Farmers are very susceptible to price fluctuation due to a lack of established market system and lack of the use of a futures exchange or hedging system. Corn farmers were happy with prices in MY 2011 but corn traders had problems.

In a normal season, first crop planting in the Cukurova region begins in the end of February and ends in April but in MY 2011 due heavy rainfall, planting was one and half months late. First season corn planting started on March 20, 2012. First crop corn planting increased in the Cukurova, Marmara and Aegean regions. The Marmara region mostly focused on silage corn. Konya, a relatively new corn producer, increased its corn area compared to MY 2011.

In MY 2011, cotton farmers couldn't find enough seed to plant and even went to cotton ginning premises to try to collect some seed. In MY 2012, farmers demand for corn seed was higher than expected and global and local seed companies are almost out of corn seed stocks. Corn area could reach 520,000 ha depending on second season corn area but Post conservatively forecasts it at 505,000 MT and production at 4.2 MMT in MY 2012.

A major increase in corn planting area was observed in several areas. In Cukurova it was due to farmers' heavy investments loss on cotton planting in MY 2011, In the Aegean region, it was due to a dramatic increase in the number of livestock farms. In the Marmara region, it was due to increased demand from the broiler industry.

Second season corn area most probably will increase in the GAP region. The only factor that could limit the second season corn area is a possible corn price decrease in July 2012.

Second season corn planting will decreased in Cukurova not only in MY 2012 but also in the following years. Disease problems and low yields are causing farmers to grow alternative crops. Second corn will be concentrated in the GAP region in MY 2012 and in the future as well. Dry weather conditions and availability of irrigation should help GAP farmers to get 10-12 MT/ha yields in the region.

Due to heavy support for sunflower seed, high demand from sunflower oil companies and contracting directly with farmers, sunflower area is increasing in the Cukurova and surprisingly the Konya region as well. Sugar beet production is not as profitable as it was in the past for the Konya region, so some farmers will switch from sugar beet to either sunflower or corn production in the future. Post will follow this trend closely. The competition between sunflower and corn in the Konya region will wind up in the favor of sunflower production in MY 2012 but is also increasing.

Paddy Rice

The Paddy Rice Farming Act was published in 1936 to control paddy rice farming. According to this act, farmers should have permission to grow paddy rice. Each county should establish a paddy rice commission and farmers must apply to the commission to get permission to grow paddy rice. There is a 25 TL/ha permission fee that farmers should pay. The main reason for this act was to control malaria and to distribute water fairly among paddy rice farmers. Illegal paddy rice farming carries a penalty of 610 TL/ha. This also restricts paddy rice area increase.

Paddy rice is mainly grown in the Thrace region with modern agricultural techniques and equipment. The major rice growing provinces are Edirne, Balıkesir, Çanakkale, Bursa, Samsun, Çorum, Sinop, and Kastamonu. There is around 60 paddy rice milling factories with a very low capacity use. Like in other milling industries, there is excess capacity in paddy rice milling in Turkey. Turkey would like to use this excess capacity for export purposes.

The most productive region is Thrace, which contains 10-15% of Turkey's total rice plantation area. Ipsala alone produces 20,000 ha of paddy rice. The average yield in Thrace is 8 MT/ha.
Rice planting will start in the middle of May 2012 and finish by the end of the same month. MY 2012 plantation area increased 2% due to favorable weather conditions and increased water levels in several dams. Rice yields depend on rainfall at the end of August and early September. The harvest normally begins in September and ends in October.

Rice production was at record levels in MY 2011, estimated at 750,000 MT. There were area increases in the Gonen, Manyas and Thrace regions. The Osmancik variety now dominates the whole area. For MY 2012, post forecasts paddy rice production at 770,000 MT.

New irrigation projects will dramatically increase paddy rice area in 2013 and 2014. Large dam and irrigation projects in South Marmara, the Samsun region and the Thrace region are among these projects. The government already completed dam and irrigation projects in South Marmara which opened 10,000 ha of new paddy area in 2010. New projects will open an additional 20,000 ha of new paddy area in the Thrace and South Marmara regions and 20,000 ha in the Samsun region.

Lentils

Post estimated MY 2011 lentil production at 400,000 MT and 2012 lentil production at 450,000 MT.

The pulse planting area normally changes depending on the availability of seeds, prices and premiums of the previous year's harvest, weather conditions, fertilizer prices, plant diseases, and the presence of weeds like broomrape (Orobanche spp) in the field. The Ministry of Agriculture and Rural Affairs introduced a 90 TL/MT pulse premium in 2008 and increased it to 100 TL/MT in 2009, 2010, 2011 and 2012. This high pulse premium led to increased lentil area in MY 2012.

The GAP region, which is in South East Anatolia, traditionally grows pulses. The GAP development project, including new dams and irrigation canals, has also led to increased lentil yields and plantation area. In MY 2011 lentil area increased but due to heavy rainfall, production actually decreased. The harvest was late by 15 days.

Consumption:

Wheat

Turkey produces 101 million 250-gram loaves of bread every day. The Istanbul Municipality bread factory (IHA) produces 1.7 million loaves every day. IHA has three bread production factories in Istanbul. In terms of daily production they are the biggest bread producer in Europe. The price of bread at IHA (0.50 TL/300 grams) is lower than the market price (0.85 TL/300 grams). IHA sells 70% of their production at their small bakery shops and 30% at private markets.

The Ankara Municipality bread factory is the second largest Municipal bread factory with a production of 1 million 300-gram loaves daily. The Bursa municipality bread factory produces 400,000 loaves daily. According to estimates, municipalities produce around 10 million loaves every day in Turkey. They have a 10% market share. The price of municipality bread is usually 40% cheaper than bread produced in the private sector. The marketing strategy of municipality bread companies is to franchise into very small bakery shops which are privately owned

There are around 5,000 small unregistered bakeries in Istanbul, creating concerns about food safety. The Government defines its role in the bread market as leading to higher quality, more hygienic, and more varied types of bread by the private sector. In the reality the municipality bread companies distort the bread market and provide subsidized bread to consumers. IHA sells 35 different bread varieties but private small bakeries only usually produce 3-4 different varieties. The most common variety is white bread. The Government is trying to encourage bread producers to use bran, rye, and oat to produce multi-grain bread to improve public health.

The Turkish Grain Board (TMO) gets involved in the grain market when there is a surplus in the market and announces their procurement price usually when prices start to decline to unaccepted levels for farmers, particularly in May when the harvest starts in the southern part of Turkey. In MY 2011, TMO announced procurement prices on May 30, 2011 which was a little bit later than their historical trends. The main reason was the high market price, especially in the Cukurova region. Traders and millers started to buy wheat at around 620 to 700 TL/MT when the first wheat was harvested and the price gradually decreased to 600 TL/MT when it was clear that there would be surplus wheat in the Central Anatolia region.

Moreover, poultry producer and feed millers were very active buyers in the wheat market in Cukurova and the South East Anatolian region due to a ban on corn imports under the Biosafety Law. It is projected that poultry producers will be active again in the Cukurova wheat market, which will lead to high wheat prices in the first couple weeks of the harvest.

For the first time this year TMO started to purchase wheat according to the protein content (quality). The table below shows prices announced for wheat with a protein content of 11.5-12%. The July-August purchase price for 12-12.5% protein was 611 TL, for 12.5-13% protein was 617 TL/MT and for wheat with a protein content of 13% and above was about 623 TL/MT.

Table 4: TMO Grain intervention price

TURKEY: TMO GRAIN INTERVENTION PRICE							
TYPES OF WHEAT		MY 2010 TMO INTERVENTION PRICE (TL/MT)				SALE PRICE (TL/MT)	
		JUNE-JULY-AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	NOVEMBER	DECEMBER
DURUM WHEAT MY 2010	DURUM WHEAT FOR PASTA	575	585	595	605	675	685
	LOW QUALITY DURUM WHEAT FOR PASTA	470	480	490	500	550	560
TYPES OF WHEAT		MY 2011 TMO INTERVENTION PRICE (TL/MT)				SALE PRICE (TL/MT)	
		JULY-AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	NOVEMBER	DECEMBER
DURUM WHEAT MY 2011	DURUM WHEAT FOR PASTA	640	645	650	655	760	765
	LOW QUALITY DURUM WHEAT FOR PASTA	520	525	530	535	615	620

TMO procured wheat mainly from South East Anatolia, Central Anatolia and the Thrace region. Due to a high price in the Cukurova region they didn't buy any wheat from there. But in some areas, like Diyarbakir and some parts of Konya, there were quality problems in MY 2011 so farmers were forced to sell wheat to TMO due to lack of alternatives. Before the major switch by TMO to a wheat procurement system based on protein content, farmers who previously wouldn't use TMO warehouses for storage due to mixing of low and high quality wheat began to use TMO storage with more confidence. In MY 2011, Farmers put 951,821 MT of wheat into TMO warehouses.

Table 5: TMO procurements

TMO procurements							
YEAR	Durum Wheat	Milling Wheat	Barley	Rye	Oat	Corn	TOTAL
MY 2009	735,000	3,035,000	1,300,000	48,500	4,150	185,000	5,307,650
MY 2010	338,931	639,003	922,778	0	0	83,491	1,984,203
MY 2011	106,014	710,168	168,980	0	0	47,632	

The wheat price was very high at the beginning of the MY 2011 season but then returned to more stable levels. In early April, high quality milling wheat (13% protein and above) was sold for the relatively high price of 390 USD/MT, and average milling quality wheat (12% protein) was sold for 340 USD. Surprisingly, feed quality wheat also kept its strong position at 320 USD/MT due to continuous demand from the broiler industry.

Table 6: Durum wheat price

TURKEY: Anatolian durum wheat price at commodity exchange (USD/MT)												
MY YEAR	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
2006	216	220	235	238	240	258	259	261	272	277	283	291
2007	336	349	341	377	441	488	503	516	554	545	564	616
2008	632	660	612	580	466	382	407	367	355	341	339	324
2009	328	288	301	299	290	293	275	281	348	312	311	305
2010	330	370	356	355	370	376	400	391	398	450	453	406
2011	387	375	352	347	330	363	336	375	375	359		

Table 7: Milling wheat price

TURKEY: Milling wheat price at commodity exchange (USD/MT)												
MY YEAR	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
2006	253	245	257	272	275	286	293	304	324	331	330	309
2007	338	360	350	387	415	427	433	446	478	492	490	485
2008	466	479	480	450	375	343	352	335	324	315	314	321
2009	330	339	326	317	341	323	330	369	364	352	349	334
2010	340	339	378	368	383	400	460	400	390	445	460	418
2011	418	369	346	342	342	340	341	364	364	360		

Traders can follow the Turkish wheat price using the websites provided below. The Polatli and Konya Commodity exchanges are the ones where mostly high- and medium-quality wheat is traded. The Adana Commodity Exchange usually is not very active in wheat trading due to millers and traders heavy involvement at the farm level in Cukurova. The reason they are so active here is that it is the first wheat harvested in Turkey and farmers do can easily find buyers in their villages.

http://www.polatliborsa.org.tr/tr/index_framed.htm
http://www.ktb.org.tr/?cat=46
http://www.esktb.org.tr/
http://www.polatliborsa.org.tr/tr/TRHububatBulteni.htm
http://www.etb.org.tr/archives.php?category=1&gun=04&ay=04&yil=2012&gun2=04&ay2=04&yil2=2012
http://www.adanatb.org.tr/index.php?option=com_content&view=category&id=39&Itemid=103

Barley

There are two major sectors using barley in Turkey. One is the malting and beer industry and the other is the feed sector. The malting and beer industry uses 230,000 MT of barley. The beer industry uses 72% of industrial barley. There are 7 beer manufacturers but two of them have 99% of the market share. Turkish beer production and export slightly increased in 2010.

Table 8: Beer sector statistics

Turkey: Beer sector		
Parameters	**2009**	**2010**
Production	10,219,290 hl	10,278,536 hl
Export	988,133 hl	1,077,333 hl
Import	3,925 hl	13,800 hl
Domestic consumption	9,235,081 hl	9,215,003 hl
Value of production	681 million €	752 million €
Number of beer manufacturers	7	7
Number of production facilities	11	11

Source: TAPDK

The feed industry uses barley mainly for ruminant feed. Overall, the feed industry is growing very fast. There are a lot of new investments in Turkey on both dairy and recently also on fattening cattle farms. Extensive development in the broiler and egg industry also continues. Major increases in this sector were observed in broiler feed and ruminant feed production. This increase was also reflected in barley demand.

Table 9: Feed production

Turkey: Feed production (MT)		
Types of feed	2010	2011
Broiler feed	3,593,576	4,031,302
Layer feed	820,899	953,819
Other poultry feed	547,578	596,270

Total poultry feed	4,962,054	5,581,390
Feeder cattle feed	2,310,524	2,837,345
Milking cow feed	3,537,312	3,898,019
Total ruminant feed	5,847,836	6,735,364
Fish feed	184,810	239,273
Other feed	52,614	62,425
Total feed production	11,501,123	13,162,340

Source: Feed millers association (YEMBIR)

The barley price was very strong because of this high demand from the livestock and broiler sectors. The broiler industry preferred to use feed quality wheat in MY 2011 but in the GAP region broiler companies procured a high amount of barley for their feeding rations. The strong price is not reflected in the below table because of a relatively strong USD against the TL starting from July 2011. The feed barley price normally should be around 450-500 TL/MT but increased to up to 580 TL/MT in MY 2011 and stayed around 575 TL/MT in April 2012.

Table 10: Barley price

Barley price												
YEAR	**JUNE**	**JULY**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**
2007	287	310	302	342	381	407	410	397	400	369	375	428
2008	417	427	434	396	327	302	310	301	288	270	268	270
2009	217	220	225	234	245	230	225	236	236	231	236	229
2010	232	266	256	276	286	288	333	316	334	323	332	311
2011	297	285	289	300	296	295	293	275	292	295	330	

The feed industry imported 4.66 MMT of feed raw material, including feed additives. Most imported raw materials are protein based products such as soybean (1.29 MMT), soybean meal (541,000 MT), sunflower meal (568,000 MT) and wheat bran (302,000 MT).

The DDGS price was very stable until one company imported 20,000 MT of DDGS and others began importing as well. The wheat bran price is very high due to the unavailability of corn and DDGS at the market, which helped wheat millers to increase their profits.

Feed industry growth rate is in parallel with the developments in broiler, egg and livestock industry. Feed industry as in line with governments 2023 target set targets for 2023. According to their strategy feed production is forecasted at 28 MMT.

Feed industry growth rate will continue to have steady increase on the following years. New investments in the dairy industry will be now supported by modern fattening cattle farming. Moreover poultry industry export potential is not realized yet; there are still big opportunities like Saudi Arabia and EU. There is also tremendous increase on the growth of egg industry which at the moment enjoys export mainly to Iraq and planning to export liquid egg to EU in the recent future. There will be increased demand to all protein sources mainly corn and soybean. Corn and soybean production deficit will be completed by imports mainly from U.S and Latin America.

Table 11: Feed industry 2023 projection

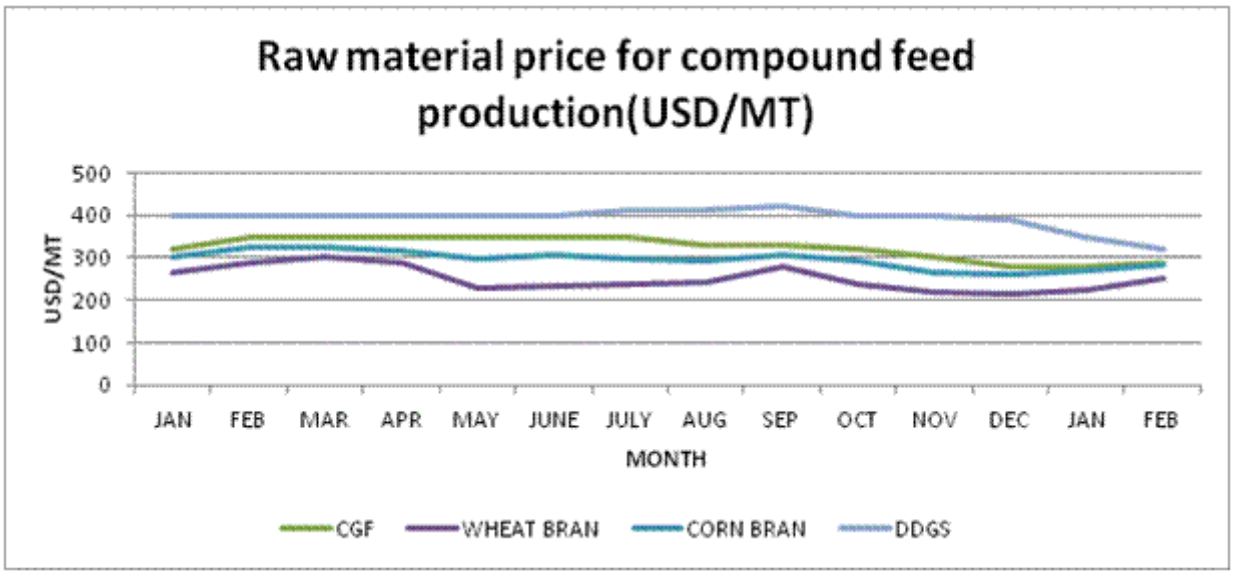
Turkey: Feed use and import estimate and forecast				
PRODUCTS	*USE*		*IMPORT*	
	2011	**2023**	**2011**	**2023**
CORN	2,250	3,800	372	1,500
WHEAT	1,650	2,800	NA	0
SOYBEAN	850	1,500	1,298	1,500
SOYBEAN MEAL	850	1,500	514	1,500
SOYBEAN OIL	170	290	NA	NA
BARLEY	2,500	4,250		1,500
SUNLOWER SEED MEAL 36	750	1,300	568	1,000
SUNFLOWER SEED MEAL 28	1,170	2,000	NA	NA

Source: Feed millers association (YEMBIR

Government support to the livestock industry was not only limited to premium support but they also introduced long term installment, zero interest credit which was distributed to 111,000 farmers at 6 billion TL in August, 2010-April 2011. This credit support will continue in 2012 and this will help the feed industry to meet its targets in the future.

In addition, the United States and Turkey reached an agreement on March 2012 on a fattening cattle health protocol which will enable Turkey to import high quality U.S. fattening cattle. The Government wants industry to produce meat from either from sheep and goat or beef from beef variety cattle. Currently the main cattle variety used for beef is Holstein.

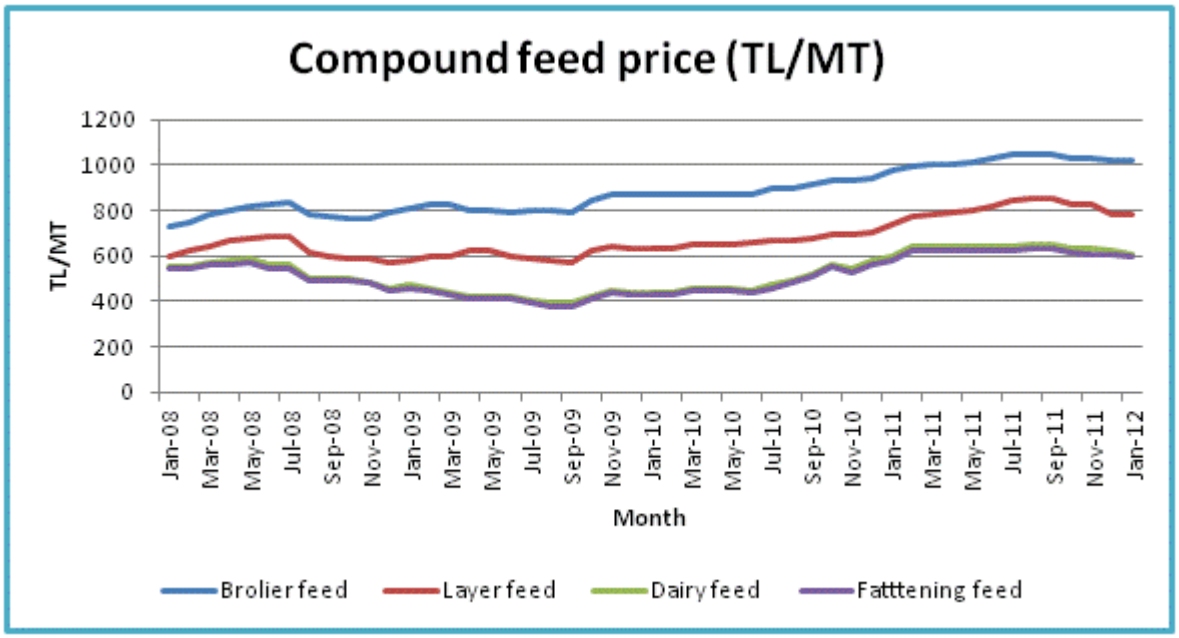
Figure 2: Feed raw material price



Source: YEMBIR

The price for broiler feed, which is mostly based on high protein, remained high in 2011. The compound feed price trend usually follows global commodity prices, since 30% of the feed raw material is imported. The high barley feed price also kept prices high, particularly feed for dairy and fattening cattle.

Figure 3: Compound feed price



Corn

There are two main users of corn in Turkey, the feed industry and the corn starch industry. The corn starch industry is controlled by the government through quota allocations. There are five starch companies, three of them are in Adana and two of them are in the Marmara region. The total production capacity of the corn starch industry is 1.2 MMT. The sector uses 800,000 MT of domestic corn and produces 515,000 MT of sugar, either in the form of high fructose corn syrup or glucose syrup.

The Energy Market Regulatory Authority (EPDK) published a regulation on mandatory bio-ethanol and bio-diesel use on the official gazette dated September 27, 2011. According to the regulation, gasoline should contain 2% (volume) of bio-ethanol which is produced from domestically produced agricultural commodities by January 01, 2013, and 2% by January 01, 2014. Moreover, diesel should contain 1% of biodiesel by January 01, 2014, 2% by January 01, 2015 and 3% by January 01, 2016.

According to the EPDK 2010 sector report, Turkey consumes 13.9 MMT of diesel and 2.1 MMT of gasoline every year. In order to blend bio-ethanol with gasoline, Turkey should produce 80,000 m^3 of bio-ethanol from either 1 MMT of domestically produced sugar beets or 250,000 MT of corn.

Keeping in mind that Turkey has a surplus of sugar beet production and the biggest bio-ethanol premises belongs to a sugar beet cooperative in the Konya region (has 56% of market share), post forecasts that most bio-ethanol will be produced from sugar beets. The second largest bio-ethanol facility, however, is located in Adana and belongs to a corn starch company. The third and the fourth largest ones are located in the Marmara region, where farmers mostly grow corn for either the broiler industry or for silage purpose. Most probably, starting from MY 2012, 100,000 MT of corn will be allocated to bio-ethanol production will be gradually increased every year. This will also increase DDGS consumption. Bio-ethanol factories are expected to produce 30,000 MT of DDGS and to sell this to local feed mills.

Table 12: Corn price

TURKEY: Corn price at Commodity Exchange (USD/MT)												
MY YEAR	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG
2009	272	279	270	269	287	300	292	300	289	285	306	310
2010	317	345	335	318	347	355	369	391	400	410	438	351
2011	337	336	300	297	305	315	338	325				

Source: Adana CME

The corn price was high in the beginning of MY 2011 due to short crop expectation. The crop was indeed short but demand from the feed industry shifted to wheat and the price started to decline. MY 2011 also saw a volatile USD/TL exchange ratio. The price was steady after October, rose in March 2012 and is expected to rise a slightly until August 2012.

Paddy Rice

The paddy rice price was 485 USD/MT on March 16, 2012 in the Bandirma CME and 540 USD/MT in Mersin CME. At the Mersin CME, the local rice price was 1020 USD/MT in April 2012.

Turkish consumers prefer the Calrose, Baldo and Osmancik varieties. Annual rice consumption is approximately 7.1 kg/person. In Turkish cuisine rice is very important for making pilaf. Most people prefer the Baldo and Osmancik (domestic variety) over Calrose.

According to several studies on rice consumption, Turkish families prefer to buy rice once per month. There are 1, 2,5 and 5 kg packages available at the markets. Consumers are very sensitive to price (50%), quality (35%) and variety (30%)

There are 150 paddy rice factories in Turkey. In the last three years exports were the major target of the paddy rice industry. Previously, the main paddy rice factories were located where paddy rice was produced, like in Thrace and the South Marmara region. However due to its proximity to export destinations, the port at Mersin is now the major region attracting new investments in paddy rice factories. There are 10 paddy rice factories in Mersin. New paddy rice factories in Mersin have very large capacities, around at 100,000 MT. Total Turkish paddy rice factory capacity is 3,200,000 MT/year and capacity use is very low at 38% in 2011.

Rice companies tend to blend the Calrose with Osmancik varieties to have better prices and this creates some consistency and quality problems. The new strategy is to sell rice for Pilaf rice instead of marketing it as Calrose or Baldo. The paddy rice price fluctuated greatly in MY 2011. There were two reasons. One was the high amount of farmer stocks which was not open for trade and the other was currency fluctuations.

The industry lobbied the government to decrease the 8% VAT on rice to 1%, as the government did for bulgur and other industries. However, the government does not tend to consider rice as a staple food for Turkish consumers. They usually think that wheat and wheat products are staple foods but rice is a luxury product.

Table 13: Paddy rice price

Paddy Rice (USD/MT)												
	SEP	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**
2010	690	860	810	750	710	820	900	753	760	790	710	740
2011	674	710	640	530	530	510	485					

Trade:

Wheat flour exports slowed in February and March because of wheat shipment problems in Russia. Post estimated MY 2011 wheat import at 3.2 MMT due to slow Russian wheat imports. In MY 2012, strong wheat product exports will continue and total wheat exports are expected to reach 4 MMT. The major competitor of the Turkish wheat flour industry is Kazakhstan but they export to neighboring countries and their market variety is very limited. Turkish millers are looking for new markets and trying to expand their market shares in Latin American and Africa.

On February 17, 2012, the TMO announced an export tender for 100,000 MT of wheat and 100,000 MT of barley, held on February 28, 2012. At this tender TMO sold 35,000 MT of white milling wheat, 65,000 MT of red milling wheat and 100,000 MT of barley.

TMO carried a high amount of wheat and barley stocks in order to avoid disturbing the market since wheat and barley prices are really high at the market. Prices reached 405 USD/MT for first class red milling wheat and 325 USD/MT for feed barley at the Polatli Commodity Exchange on March 02, 2012.

Table 14: Wheat imports

TURKEY: MAJOR WHEAT SUPPLIERS				
Country	**MY 2008 (MT)**	**MY 2009 (MT)**	**MY 2010 (MT)**	**MY 2011 (MT)***
Russia	2,003,918	2,184,316	587,409	2,090,474
Kazakhstan	219,298	432,536	486,313	118,042
Ukraine	154,432	108,802	581,657	83,614
Hungary	143.951	18,458	131,569	2,680
Moldova	55,399	40,049	53,366	3,146
Lithuania	106,872	88,948	108,532	30,680
U.S.	46,821	0	1,065,573	95,158
Others	1,022,457	50,427	1,119,094	47,497
MY Total	3,609,341	2,923,536	4,133,513	2,471,291

June-February

Source: GTA

Turkish millers do not use high quality wheat for export purposes. They tend to import high quality wheat for their own bread and bakery production, usually more than 12% protein wheat, and use low quality domestic wheat for flour for their export markets.

One of the key factors in wheat trade is the inward process regime certificate. Currently the certificate price is 45 USD/MT, while six months ago it was 80 USD/MT. In order to convert this to flour equivalence you should use this formula= price of certificate/0.74/0.95. The current actual value of these certificates is 64 USD/MT.

When TMO carries high levels of wheat stocks they open these stocks to millers to make them competitive in the global market. TMO recently opened 300,000 MT of wheat stocks to millers at a price of 233 USD/MT. There was very little demand from flour millers but a little bit demand from the feed industry (60,000MT). The main reason for the lack of interest was the low quality of the wheat.

TMO has just opened their high and medium quality wheat stocks (April 09, 2012) to flour exporters at the price of 295 USD/MT. TMO sells wheat under inward process regime to millers. TMO uses a conversion rate of 74% to calculate wheat to wheat flour amounts for export to all countries except Libya (for Libya 69% is acceptable). It means that after exporting 1 kg of wheat flour, exporters are eligible to buy 1.358 kg of wheat from TMO.

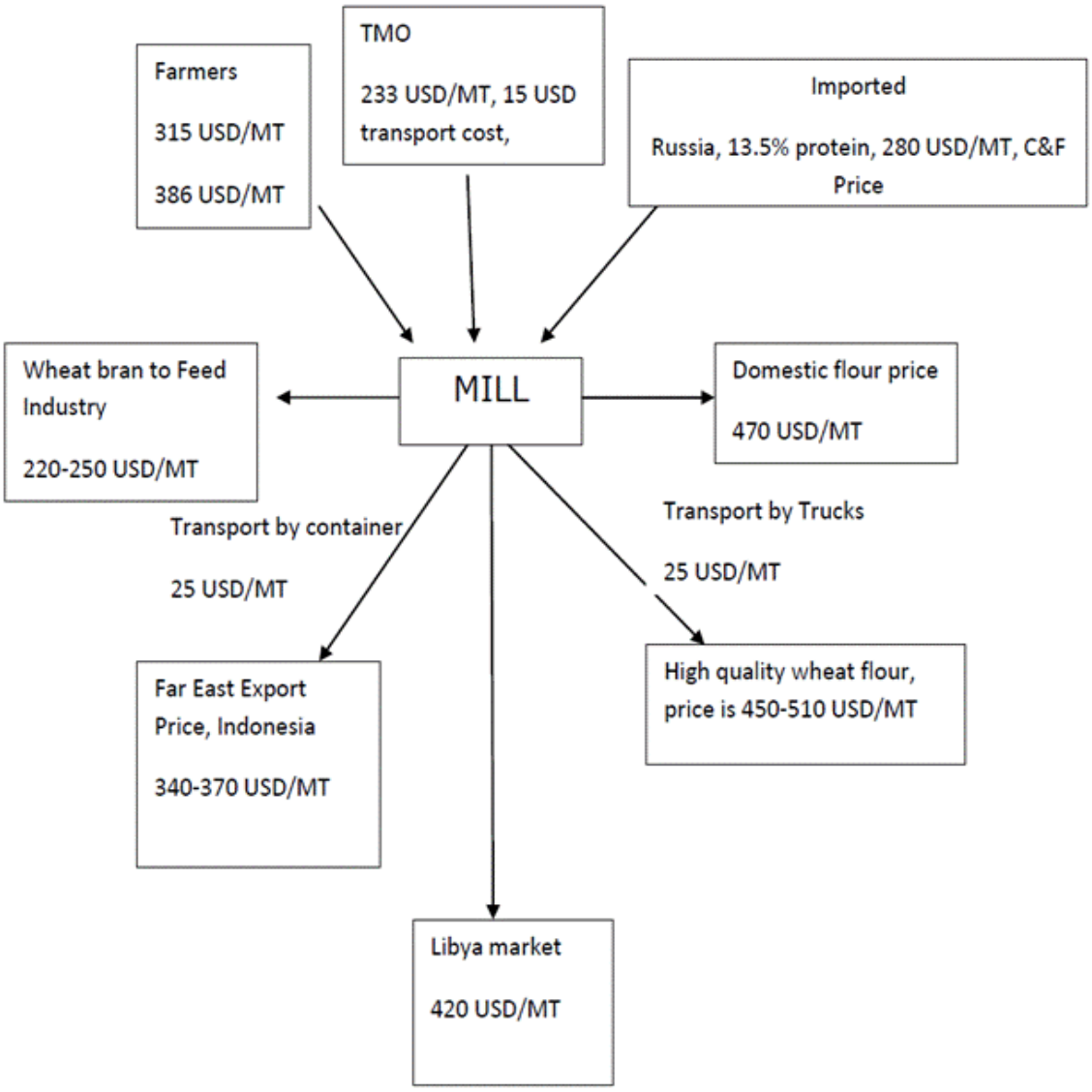
Millers use low quality wheat for Indonesia, Philippines, Thailand and flat bread markets of the Middle East and Africa. The price of domestic low quality wheat is at 315 USD/MT, whereas the first quality domestic wheat price is 386 USD/MT. There are three factors behind successful Turkish wheat flour exports to Indonesia. One is the relatively cheap container rate from Turkey to Indonesia, which is 700 USD/container. The second factor is trade of inward process regime certificates and the third factor is the availability of TMO stocks to millers at world price when there is need.

Russia, Ukraine and Kazakhstan are and will continue to be major wheat suppliers. Trade is usually done by small vessels containing around 3,000 MT to 5,000 MT. Vessels come to the Samsun port, are unloaded there and distributed around the country by trucks.

In February and March, imports from Russia were very slow due to frozen ports in the Sea of Azov and small stocks in Russia's south. The orders are expected to come in April and there will be a dramatic increase in wheat imports. In February 2012, wheat imports dropped to 90,000 MT from 300,000 MT of average monthly imports. Wheat imports are expected to reach 3.2 MMT in MY 2011 and will have a similar pattern in MY 2012. Post forecasts wheat imports at 3.3 MMT in MY 2012.

Could U.S wheat compete with Russian wheat in 2012? The answer is it might be if there is right price. There are some negotiations to buy 60,000 MT of U.S HRW in May 2012. Declined U.S wheat price at the moment helps U.S wheat to compute with Russian wheat. Turkish millers are always keen to buy DNS wheat but there is usually big price difference with either Russian or Kazakh wheat. There are a lot of speculations at the moment on Russian wheat production in MY 2012. The latest Russian wheat quote to Turkey was C&F 260 USD/MT for 11.5% protein wheat.

Figure 4: Turkish milling industry export supply chain



Source: USDA Ankara

There are two large wheat flour exporters to Indonesia, with a market share of 60% in total wheat flour exports to Indonesia. One is near the Samsun Port and therefore has a logistical advantage both for imports and exports. The other one is near the port in Istanbul and has financial and logistic advantages. Both of them can import wheat from Russia at a price of around 240-260 USD/MT.

Wheat flour exporters to Iraq are located in Gaziantep and Mardin, and they are able to send their flour by truck. They also have the advantage of being near the domestic supply from South East Anatolia. Trade with Iraq is very much dependent on personal relationships. There are around 15 companies who are active in the Iraq market but one company in Gaziantep dominates the market due to financial & logistic advantages as well as good

personal relationships. There is no banking system established for electronic money transactions and most money transfers occur through currency exchange offices and involve high risks.

The Libya market is risky lately because of the recent political instability but one company in Konya is very active with that market. Recently, Turkish millers began to concentrate on increasing sales to sub-Saharan Africa. Due to a recent price advantage gained by European millers, Turkish millers lost some of this market share but expect to gain in back in the future.

Latin America is also an attractive market for Turkish millers. They currently don't have enough contacts or experience in that region but would like to increase their level of activity there, and have requested government assistance to arrange marketing activities or high-level delegation travel to the region.

Turkey exports wheat flour to more than 100 countries but usually 45% goes to Iraq, 25% to Indonesia and 6% to the Philippines. This heavy dependence on two countries is a liability but in the short term, the Iraq market remains stable. Iran attempted to compete for a larger share but in 2011 fell behind. Indonesia has its own milling industry which is growing and threatens the future of Turkish exports to the country. Therefore, Turkish millers are hoping that Africa will be an important market in the long-term. Another major challenge for the Turkish milling industry is Russia. When Russia builds up its own milling industry, Turkey will lose a lot of market share in the Middle East, but in the short term that has not been the case. The industry still discusses consolidation. There around 700 mills which are active but only 50 are active in the export market. Even though there are 190 companies who exported flour in MY 2011, ten large mills (with daily capacity of more than 800 MT) will be the main producers in the future if consolidation occurs.

The Turkish government has set the export target at 500 billion USD for 2023 and 2 billion of this they expect to come from grain millers.

Table 15: Turkish wheat flour exports

TURKEY: MAJOR WHEAT FLOUR EXPORT MARKETS				
Country	MY 2008 (MT)	MY 2009 (MT)	MY 2010 (MT)	MY 2011 *(MT)
Iraq	631,748	793,119	800,330	705,823
Indonesia	305,967	429,826	450,584	285,116
Philippines	69,824	126,749	74,172	90,808
Thailand	26,750	31,819	31,797	36,104
Angola	28,975	22,192	698	25,156
Israel	72,565	24,370	37,653	26,333

Libya	59,250	49,367	33,488	141,677
Sudan	66,523	72,337	14,073	5,717
Yemen	1,428	16,491	7,845	1,194
Others	206,964	301,728	331,662	309,096
MY Total	**1,469,994**	**1,867,998**	**1,782,302**	**1,627,024**

*June-Feb

The pasta export markets are steady at the moment, but current investments will result in increased capacity in the near future. The major concern of the industry is securing a continuous raw material supply. Exports are relatively new but are expected to grow. A high world durum wheat price created new market opportunities in Africa. Additionally, some are investing in pasta production facilities in Gaziantep with an eye on the Iraq market. In MY 2012, pasta exports to Iraq and Africa will be strong. There is a concern about a possible production decrease in the Konya region, however South East Anatolian high quality durum wheat will possibly fill the gap. Pasta producers are also very good at blending high quality durum wheat with high quality milling wheat to maintain consistent raw material quality.

Table 16: Turkish pasta exports

TURKEY: MAJOR PASTA EXPORT MARKETS				
Country	MY 2008 (MT)	MY 2009 (MT)	MY 2010 (MT)	MY 2012* (MT)
Iraq	13,437	24,977	25,110	24,886
Benin	4,370	19,663	12,931	28,030
Japan	10,260	14,170	16,510	12,377
Togo	8,941	21,458	30,102	29,047
Angola	7,088	17,000	31,056	43,161
Others	116,822	173,815	208,799	81,128
MY Total	**160,918**	**271,083**	**324,508**	**218,629**

*June-Feb

Semolina and Bulgur exports to the Middle East are still very strong but Syria exports dropped to zero suddenly as a result of recent turmoil in the region. In MY 2012, bulgur and semolina exporters will target the Middle East. There are new investments in the Bulgur industry in the Gaziantep region. Libya and Egypt could be new market opportunities for the sector.

Table 17: Turkish semolina exports

TURKEY: MAJOR SEMOLINA EXPORT MARKETS				
Countries	MY 2008 (MT)	MY 2009 (MT)	MY 2010 (MT)	MY 2011 (MT)
Oman	0	10,938	14,216	15,463
Iraq	6,253	15,547	31,813	29,924
Saudi Arabia	7,833	13,136	7,047	4,875
Egypt	5,528	9,755	9,797	3,851
Syria	4,192	11,168	21,964	855
Others	21,870	35,999	40,260	49,209

MY Total	**45,676**	**96,543**	**125,097**	**104,177**

June-Feb

Barley

Barley exports were very slow in MY 2011. TMO usually exports barley when there is a surplus. TMO exported 100,000 MT of barley on February 28, 2012 at an average price of 258 USD/MT. Global companies which won the tender are expected to ship to Middle Eastern countries. At the moment 31,000 MT of barley has already shipped.

Table 18: Turkish barley exports

Turkey: Quantity of barley exported				
Countries	**MY 2008 (MT)**	**MY 2009 (MT)**	**MY 2010 (MT)**	**MY 2011 (MT)***
Saudi Arabia	0	558,970	22,100	0
Syria	0	97,250	0	0
Morocco	0	27,500	0	0
Libya	0	31,250	0	0
Iraq	0	13,453	0	2,000
Others	80	49,340	777	516
Total	**80**	**777,763**	**22,877**	**2,516**

June-Feb

Beer manufacturers have to import malting quality barley. The major supplier is France. Depending on domestic production, Turkey imports a long term average of about 50,000 MT of barley for malting.

Table 19: Turkish barley imports

Turkey: Quantity of barley imported				
Countries	**MY 2008 (MT)**	**MY 2009 (MT)**	**MY 2010 (MT)**	**MY 2011 (MT)***
France	71,957	57,016	47,322	14,182
Ukraine	25,726	0	2,500	475
United Kingdom	0	5,454	0	0
Russia	29,898	0	0	11
Romania	9,430	0	0	0
Others	19	1	0	11,111
Total	**141,111**	**62,470**	**49,849**	**25,779**

June-Feb

Corn

Since September 26, 2010 when the phase-in period for the Biosafety Law and the two associated regulations ended, corn and corn derivatives cannot be imported, except in limited quantities from some EU countries and Black Sea Countries by paying a premium to get certified non-biotech corn.

The Turkish Feed Millers Association submitted applications for approval of all EU approved biotech corn events for feed purposes (22 events) in January 14, 2011. Thirteen of them were approved in December 24, 2011 for import for feed use and the 9 remaining corn applications are under review.

The socioeconomic committee reports for the remaining 9 corn genes recommend that if the genes are approved, approvals should only be for 5 years instead of 10 so that if corn imports are not needed in 5 years the approval can be revoked. The socioeconomic committee reports also recommend that any products or byproducts from animals that consumed biotech feed should be labeled as having come from animals that consumed GMOs. The reports also recommend that the tariff on corn be raised to the maximum level. Moreover the scientific risk assessment reports for three of the events recommend approval, but for six of the events recommend rejection. The basis of the recommendation for rejection is that the committee concluded that not enough information is known about the events.

The Biosafety Board plans to meet in early April, and it is expected that they will make a decision on the 9 events at that meeting. The Board's decision must then be reviewed by the Agriculture Ministry for final signature and publication. It is expected that because of the negative media coverage, the Board will be under pressure to reject at least 6 of the 9 remaining corn events.

Table 20: Biotechnology corn approvals

Turkey: Biotechnology corn approval situation		
Approved varieties December 24, 2011	Reviewed by Risk Assessment and Socio Economic Committee and waiting Biosafety Board approval. Found no risk, February 06, 2012	Reviewed by Risk Assessment and Socio Economic Committee and waiting Biosafety Board approval. Found potentially risky, February 06, 2012
Bt11	MON88017	MON 863
DAS1507	DAS59122xNK603	MON 863x NK603
DAS59122	MON 810	MON 863xMON810
DAS1507xNK603		MIR604
NK603		MON 863x MON810xNK603
NK603xMON810		T25
GA21		
MON 89034		
MON89034 x NK603		
Bt11 x GA21		
59122 x 1507 x NK603		
MON88017 x MON810		
DAS1507 x 59122		

Corn area and production decreased in MY 2011, and the defacto corn import ban caused by the Biosafety Law increased expectations of a corn price increase among traders. But major corn purchasers, the broiler

industry, switched from corn to wheat and barley as a feed raw material due to inconsistent supply of other ingredients. In the beginning of MY 2011, corn traders procured corn at 610-630 TL/MT and then the price dropped suddenly to 530 TL in January 2012. The corn price is still has not reached the expected level, and remains at 580 TL/MT.

Corn imports from the United States declined dramatically in MY 2010 and MY 2011. Ukraine is the major winner in the market. Of the two major industries that use corn, corn starch and the broiler and livestock industry, the corn starch industry is more sensitive about biotech corn use because it is a food ingredient and therefore they buy raw materials domestically. The major buyer for imported corn is the broiler and livestock industry who are located mostly in the Marmara region, near the black sea shippers. The U.S corn market therefore only has an advantage in selling corn by-products such as DDGS and CGF. The major opponent of DDGS and CGF imports are millers, either wheat millers or oilseed millers. Wheat bran and oilseed bran was very cheap when there was DDGS and CGF imports, but prices increased dramatically after the ban on corn product imports. The wheat bran price reached 220 USD/MT. There are still a high demand for DDGS and CGF due to lack of enough protein raw material.

Corn demand, whether the biotech corn issue is solved or not, will be low in MY 2012 due to increased domestic production. Corn imports are forecast at 300,000 MT for MY 2012.

Table 21: Corn imports

Turkey: Quantity of corn imports (MT)				
Countries	**MY 2008**	**MY 2009**	**MY 2010**	**MY 2011 ***
Ukraine	181,788	137,392	79,781	20,342
Romania	42,829	77,380	106,905	57,676
Russia	100,148	84,750	2,871	109,756
U.S.	22,988	7,225	401	493
Argentina	11,390	13,055	8,800	5,782
Others	57,263	192,017	131,342	34,210
Total	**416,406**	**511,819**	**330,100**	**228,259**

*Sep-Feb

The Turkish government tried very hard to hinder DDGS and CGF imports by creating Turkish Standard Institute standards on fat content of DDGS, on top of its defacto bans created by the Biosafety Law. The broiler and livestock industries would like to use DDGS because of its reasonable price and high protein and fat content. Three companies have managed to import U.S. produced DDGS in MY 2011 at around 70,000 MT in March, 2012 which was not reflected at the below table. This trade is expected to grow in MY 2012.

Table 22: DDGS imports

Turkey: DDGS imports (MT)				
Countries	**M Y 2008**	**MY 2009**	**MY 2010**	**MY 2011***
U.S.	402,245	368,961	305,904	20,130
Canada	7,099	3,972	918	0
Ukraine	5,920	13,699	14,962	0
Russia	0	0	2,470	3,386

Others	480	27,312	104,212	44,386
Total	**415,744**	**413,944**	**428,466**	**67,902**

*Sep-Feb

In MY 2012, DDGS and CGF imports are forecasted at 150,000 MT of each. Turkey's broiler industry recently completed negotiations and plant inspections required to sell to Saudi Arabia. If demand increases as a result, this will lead to increased demand for DDGS and CGF. The domestic ethanol industry, which produces around 50,000 MT of DDGS at the moment, is expected to grow after the bio-ethanol mandate is put into effect in 2013.

DDGS is more popular than CGF among the poultry industry because of its high protein content. Approval of 13 corn varieties opened the window for some DDGS imports to Turkey.

Table 23:CGF Imports

Turkey: CGF imports				
Countries	**M Y 2008**	**MY 2009**	**MY 2010**	**MY 2011***
U.S.	355,326	216,992	107,007	8,573
Canada	0	0	0	0
Ukraine	36,724	43,123	58,570	28,748
Russia	0	846	331	2,307
Others	16,048	31,777	66,082	32,391
Total	**408,098**	**292,738**	**231,990**	**72,019**

*Sep-Feb

In MY 2011, paddy rice imports were very slow. There are two main reasons. First is the high level of domestic production and the second is the high global paddy rice price. Most of the paddy rice imports are done under an inward process regime for export purposes. Paddy millers are concentrated in the Mersin region where they are closer to Middle Eastern countries. About 50,000 MT of paddy rice will arrive in April and 50,000 MT is contracted for May, 2012 delivery. Post estimates MY 2011 imports at 250,000 MT and MY 2012 imports are forecasted at 220,000 MT. Actual imports will depend on export demand.

Table 24: Rice imports

Turkey: Rice imports				
Country	**M Y 2008**	**MY 2009**	**MY 2010**	**MY 2011***
U.S	53,268	165,102	212,900	64,424
Russia	5,919	81,680	121,007	36,213
Egypt	51,898	56,889	217	0
Thailand	21,948	2,016	2,423	1,639
Pakistan	15,541	21,798	4,561	498
Italy	4,910	29,426	6,801	1,363
Others	56,293	101,791	76,879	16,667
Total	209,777	458,702	424,788	120,804

*Sep-Feb

Paddy rice are still an important import and millers want to import brown rice from the United States, but sales are limited now because of high prices.

Previously, imports were mainly done for domestic use but recently imports for the export markets increased drastically. This led to many changes in the rice trading sector. Millers who also have export connections are now in an advantageous position in the paddy rice market. Moreover some new grain companies with strong financial situations but less market experience are active in the paddy rice market.

Table 25: Rice imports, classified by process

Rice import; classified by process								
	MY 2010				MY 2011			
Country	Rice in the Husk	Husked rice (Brown)	Semi-Wholly milled rice	Broken rice	Rice in the Husk	Husked rice (Brown)	Semi-Wholly milled rice	Broken rice
U.S	200,383	12,442	75	0	38,624	25,780	22	0
Russia	116,723	794	3,515	0	32,747	0	3466	0
Egypt	0	0	217	0	0	0	0	0
Thailand	0	30	2,393	0	0	0	1639	0
Pakistan	0	0	4,561	0	0	0	498	0
Italy	109	0	6,692	0	0	0	1363	0
Others	48,840	0	28,038	0	12,307	0	4,359	0
Total	366,055	13,266	45,491	0	83,678	25,780	11,347	0

Libya and Syria are the most important markets for Turkish rice millers. Exports to Libya reached 40,175 MT in MY 2011 and 11,965 MT in MY 2012 (September-February). Due to turmoil in Syria exports slowed and exporters are now having difficulty to transport contracted sales to Syria. There are some new actors in the Libya market with experience in other commodities. This experience will help rice exports to Libya. Rice exports in MY 2011 are estimated at 75,000 MT and forecasted at 80,000 MT in MY 2012.

An inward processing regime was successfully applied to the paddy rice sector, similar to one used in the wheat sector. The main target is to allow Turkey to become the rice miller for the region. They import paddy rice mainly from the United States, mill it, and export it to the Middle East and North African countries. Recent large big investments in the Mersin port increased the capacity and price competition of the sector greatly. Their major concern is the government's calculation of the conversion and efficiency ratios. Under the inward processing regime, the conversion factor is 60%, bran is 15% and hull is 20%. Traders asked the government to change this calculation to conversion factor 60%, bran 9%, and hull 20% and broken rice 11%. In the current system they are not able to use broken rice under the inward processing regime. If the government changes the calculation, exporters will be able to meet the broken rice demand mostly coming from the Middle East.

Table 26: Rice exports

Turkey: Rice Exports(MT)				
Countries	**M Y 2008**	**MY 2009**	**MY 2010**	**MY 20011***

Syria	9,049	17,002	23,118	20,683
Jordan	4,711	3,668	2,209	636
Sudan	0	621	1,525	110
Iraq	1,042	3,451	1,395	1,893
Others	9,071	1,584	65,544	29,848
Total	**23,873**	**26,326**	93,791	53,170

Stocks:

TMO has around 4.5-5 MMT of elevator capacity and is investing in modernizing its elevators. TMO is also renting modern elevators from the private sector. At the moment TMO has 500,000 MT of port elevators, 3.5 MMT of inland elevators and 130,000 MT of long-term rented elevators. TMO carries 1.84 MMT of wheat stocks into MY 2012. Due to a high level of imports initiated by government decision to decrease the import tariff to zero on February 25, 2011 and 300,000 MT of two TMO import tenders on February 15 and January 22, 2011, Turkey carried a high level of stocks to MY 2011. Until February 2012, the high stock level was a concern to traders and farmers as well but due to slow down of Russian imports because of bad weather conditions, domestic stocks were heavily used by millers in February and March. The private sector at the moment has high stocks in Adana and the Konya region where most traders bought wheat at very high price. They will release those stocks in April and May, 2012. A high level of imports from Russia in April and May will possibly again put some pressure on the domestic wheat price.

Table 27: TMO stocks

Products		Quantity (MT)
Wheat	Durum	255,297
	Milling	1.591,812
Total TMO wheat stock		1,847,109

The licensed warehouse system opened in 2011 by TMO and Turkish Union of Chambers in Polatli, with 40,000 MT of grain storage capacity. The Sanliurfa and Konya Commodity Exchanges applied for 100,000 MT of warehouse licenses, and construction will start in 2012. The Edirne and Denizli Commodity exchanges are also waiting to get licenses. There are a lot of new investments in modern steel elevator construction. This will increase storage capacity of the private sector and also give farmers flexibility to decide on the timing of their commodity sales. Within two years there will be around 2 MMT of new, modern elevator capacity constructed. The leading grain company constructed 300,000 MT of elevator at Mersin port. Not only private sector but also government state farm and TMO are very active on grain elevator construction.

Corn

TMO procured 47,616 MT of corn which is still waiting at TMO elevators. Moreover farmers put 128,177 MT of corn to TMO elevators for storage. There are still high levels of corn stocks especially in the hand of traders, who procured corn in September 2011 at a high price and are expected to sell to the broiler industry in June, July and August, 2012.

Barley

TMO procured 167,214 MT of barley in MY 2011 and exported 100,000 MT of barley. TMO has 570,465 MT of barley stock. TMO has recently opened barley stocks to feed millers

Paddy Rice

High production levels increased paddy rice stocks in MY 2011. Farmers kept paddy rice for a long time at their storage houses in order to increase the price. TMO announced a paddy rice price on November 4, 2011 of 1,200 TL/MT for Baldo, 1,060 TL/MT for Osmancik and 950 TL/MT for Calrose variety.

TMO procured 11,292 MT of paddy rice in MY 2011. Farmers put 3,661 MT of paddy rice into TMO elevators. TMO has 12,850 MT of paddy rice at their elevators.

Policy:

Grain policy development is a challenge for the government since the average land size is 6 ha, and this land has is usually spread out in 6-7 non-adjacent parcels. There are 3.1 million farms in Turkey. The government has been trying to change the inheritance law to prevent further segmentation of land.

The Turkish Grain Board (TMO) is still one of the major players in the grain market, however the Government is planning to change the role of TMO in the recent future to a more market regulatory agency rather than procurement agency. TMO's first licensed warehouse in Polatli, with a capacity of 40,000 MT, has a joint venture of The Union of Chambers and Commodity Exchanges of Turkey (TOBB). TMO currently has 4.5 MMT of elevator capacity. They have open silo, concrete and steel silos.

TMO, for the first time, in MY 2011 introduced a new purchase system called protein based procurement system. Previously TMO was not able to separate grain by their chemical properties like protein content but they were only able to sort grain by looking some of the physical parameters including foreign material, weak kernel etc. This led to mixing high quality grain at the same elevator with low quality grain. Therefore it was not very attractive for grain farmers to store their products at TMO elevators. Most of the farmers do not have grain elevators on their farms . Since there is only one license elevator in Turkey which was recently opened, farmers tend to sell their crops immediately after harvest at the market or to TMO.

TMO recently change the way they announce pricing. They used to announce a price in May and then gradually increase the price until October. Because of limited storage, usually TMO experienced long lines of trucks at their facilities during harvest time. Farmers have two options if they decide to use TMO elevators. They can either sell to TMO or use TMO elevators for storage. In the past, farmers didn't like to use TMO elevators due to TMO's policy of combining high quality and low quality wheat at the same elevators and not giving guarantees of receiving the same quality products that they delivered. The new protein-based purchase system allowed farmers to feel comfortable using TMO elevators for short and long term storage. When farmers use TMO elevators and do not sell to TMO they are not required to pay any elevator rent to TMO, since TMO would like to encourage farmers to sell their product at the market. But in the end if they decide to sell it to TMO they are required to pay a little amount of fee for storage fee (0.05 TL/MT/day).

There are 112 Grain Exchanges all around Turkey. They serve as spot exchanges where grain physically exchanges hands. At the grain exchange traders, millers and TMO sis at the auction and negotiate prices on open auction. The most active grain exchanges for wheat and barley are Polatli, Konya, Adana and the Edirne exchanges.

There are several different grain support systems which are managed by the government. The most significant is the premium support system. Each year the government decides on what will be each commodities premium level. It is the most market distorting government support for grain. In MY 2011, the premiums were 50 TL/MT for wheat, 40 TL/MT for corn and barley, and 500 TL/MT for soybeans. The government tries to encourage farmers to grow more products locally like rice and soybean by setting premiums for imported crops higher.

This premium support is most important in areas where more than one product could be produced such as the Cukurova region, GAP region (Southeast of Turkey), and Aegean region. However in Central Anatolia and East Anatolia, due to harsh weather conditions, they can only grow wheat or barley. This equation could change if the government is able to complete the KOP (Konya valley irrigation project) in 2013 as scheduled.

In MY 2011, MINFAL announced a support program in February so that farmers could adjust their planting choices based on the support program but in MY 2012, premium supports were announced in April 04, 2012 by MINFAL but these were not yet published in the Official Gazette. As per policy in previous years, this year the announcements were so late as to minimally affect farmer's planting decisions. The total agriculture support budget is 7.6 billion TL for 2012, but was 6.99 billion TL in 2011. The livestock support budget share is increasing since 2002 and reached 2.1 billion TL in 2012. Premium supports have remained fairly the same at 2.5 billion TL. Increased fertilizer and diesel prices led MINFAL to increase its support budget for diesel and chemical support payments.

Table 28:Diesel and fertilizer support

Types of farming	**Diesel support (TL/ha)**		**Fertilizer Support (TL/ha)**	
	2011	2012	2011	2012
Pasture, ornament crops, landscape crops	25	27	35	37
Grain, forage crops, fruits and vegetable, pulses	37.5	40	47.5	50
Oilseed and industrial crops	60	64	60	63

The announcement of premium supports will not have an effect on farmers planting decisions. The barley, oat and rye premium increased from 40 TL/MT to 50 TL/MT but barley, oat and rye are already planted. The Government's main target is to encourage production of more oilseed crops and cotton. Turkish consumers prefer sunflower oil and corn oil, but after extensive media coverage about the dangers of biotechnology and corn, corn oil demand dropped and shifted to sunflower oil. The government encouraged this change by increasing the sunflower seed premium to 240 TL/MT, whereas the corn premium was kept the same as the previous year.

Table 29: Premium supports

Turkey: Premium Supports (TL/MT)

Products	2011	2012	Products	2011	2012
Sunflower oilseed	230	240	Wheat	50	50
Soybean	500	500	Barley, Rye, Oat	40	50
Canola	400	400	Safflower	400	400
Cotton	420	460	Olive oil	500	500
Corn	40	40	Paddy rice, Dry bean, Lentil	100	100

Even though there are a lot of new investments in livestock farming, including live animal imports, MINFAL surprisingly didn't change forage crop support programs. The feed and livestock industries are concerned about high feed prices. There is very limited pasture development and forage crop planting. The feed industry is dependent on soybean imports, corn by-products imports and bran from oilseed mills, wheat mills, and the cotton ginning industry.

Table 30: Forage crop support

Turkey: Forage crop supports (TL/ha)					
Products	2011	2012	Products	2011	2012
Alfa Alfa (irrigated)	1,300	1,300	Sainfoin	900	900
Alfa Alfa (dry)	700	700	Per annual forage crops	300	300
Silage corn (irrigated)	550	550	Artificial pasture	750	750
Silage corn (dry)	300	300			

MINFAL and farmers are both concerned with quality and yield. Millers complain that they cannot get high quality wheat and barley. Farmers had some problems obtaining pulse seed in the past. Keeping those problems in mind, it is expected that MINFAL will increase support programs for certified seed production and use, but this didn't happen in 2012. Certified grain seed production and distribution is mainly controlled by one of the government agencies called TIGEM (state farm), and their seed quality is always a point of concern for producers.

Table 31: Seed support

Turkey: Certified seed support (TL/ha)					
Products	2011	2012	Products	2011	2012
Wheat, Alfalfa	60	60	Dry bean, chickpea, lentil	70	70
Barley, oat and rye	45	45	Sesame, canola, safflower	40	40
Paddy rice, peanut	80	80	Potato, soybean	200	200
Sainfoin, vetch	30	30			

MINFAL's main animal sector target in MY 2012 is to increase the beef cattle breed population. MINFAL introduced a 350 TL/head support system in 2012 for beef cattle. In 2012, a 300 TL/head support system was introduced only for six months and then they decided to revoke it. Turkey and the U.S. signed a fattening cattle protocol in March 2012 which will serve to help MINFAL's target . MINFAL believes that in order to increase red meat production, the sheep and goat population and beef breed population should increase. This target was reflected by support price increases.

School milk project was start on May 2, 2012. MINFAL held school milk tender on April 17, 2012. The total cost of project is 74,835,884 TL. According to project, government will distribute 200 mm milk to 7,185,021 school kids every day. The average milk price at the tender was 0.52 TL/Liter. Milk will be distributed at the government schools, private schools will not benefit from program. The projects cover pre-school kids to fifth grades kids at the primary school. The main target of this project is to support farm gate milk price.

Table 32: Livestock support

Turkey: Livestock support (TL/head)					
Types of animal	**2011**	**2012**	Types of animal	**2011**	**2012**
Mother cattle	225	225	Beef cattle	0	350
Water buffalo	300	350	Sheep-Goat	15	18
Disease free farm	300	300	Registered cattle-Additional to cattle support	50	60

Turkey has high custom tariff rates for major commodities including wheat, corn, and barley. The bound rate for wheat is 180% and the applied custom rate for wheat is currently 130%. If there is shortage TMO and the government work together to decrease the tariff to whatever they want.

The import processing regime is also very important. Wheat was permitted to be imported under an inward processing regime since 2004. Wheat millers first export wheat flour and then they are eligible for duty free wheat imports via a Government issued certificate, which is a tradable item.

Wheat was, is and will always be a strategic commodity for Turkey. Bread is the staple food. Per capita bread consumption is the highest in the world at 155 kg. According to MINFAL, There are 101 million units of bread (250 gram) produced every day. MINFAL is now trying to reduce waste of bread, which is 5.5 million units (250 gram) every day.

Certified wheat seed production is mainly done by TIGEM (State farm). Their varieties are not very good. There are hardly any private companies active in the wheat seed market. Even though certified wheat seed production (80,000 MT in 2002 and 420,000 MT in 2011) and use increased, the yields didn't increase as projected. The main wheat yield increase was due to increased fertilizer used, mechanization and better harvesting techniques.

MINFAL announced its year targets 2023 for many sectors. According to this report, in 2023 Turkey will become a top agricultural producer, with 40 billion USD in agricultural exports. In the same report, the government announced that it plans to complete agriculture land consolidation by 2023. Currently 1.1 million ha have been consolidated, especially in the South East Anatolian region. The government target is 14 million ha area to be consolidated by 2023. In the GAP region, 2 million ha of land will be consolidated, in the KOP project area of Central Anatolia 550,000 ha of land will be consolidated and in Eastern Anatolia 300,000 ha of land will be consolidated.

Irrigation is still the government's major priority in Agriculture. They still actively support closed irrigation systems such as drip irrigation using 50% investment grants. Efficiency of the current irrigation system is around 45%. Almost all canals are open canals (94%) and only 6% are a closed tube systems. According to government statistics there are 8.5 million ha area which could be irrigated and 5.5 million ha are already irrigated. It is the government's goal that by 2023, 8.5 million ha. will be irrigated.

Production, Supply and Demand Data Statistics :

Wheat Turkey	2010/2011		2011/2012		2012/2013	
	Market Year Begin: Jun 2010		Market Year Begin: Jun 2011		Market Year Begin: Jun 2012	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	8,000	8,000	7,700	7,700		7,820
Beginning Stocks	1,815	1,733	2,176	2,083		1,983
Production	17,000	17,000	18,800	18,800		17,500
MY Imports	3,677	3,666	3,200	3,200		3,300
TY Imports	3,517	3,517	3,200	3,200		3,300
TY Imp. from U.S.	870	870	0	95		0
Total Supply	22,492	22,399	24,176	24,083		22,783
MY Exports	3,016	3,016	4,000	4,000		4,000
TY Exports	2,946	2,946	4,000	4,000		4,000
Feed and Residual	800	800	1,400	1,400		1,000
FSI Consumption	16,500	16,500	16,700	16,700		16,800
Total Consumption	17,300	17,300	18,100	18,100		17,800
Ending Stocks	2,176	2,083	2,076	1,983		983
Total Distribution	22,492	22,399	24,176	24,083		22,783
1000 HA, 1000 MT, MT/HA						

PSD-Barley

Barley Turkey	2010/2011		2011/2012		2012/2013	
	Market Year Begin: Jun 2010		Market Year Begin: Jun 2011		Market Year Begin: Jun 2012	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	3,350	3,350	3,200	3,200		3,300
Beginning Stocks	790	83	697	190		450
Production	5,900	5,900	6,500	7,000		7,000
MY Imports	57	57	150	60		50
TY Imports	39	39	150	60		50
TY Imp. from U.S.	0	0	0	0		0
Total Supply	6,747	6,040	7,347	7,250		7,500
MY Exports	50	50	150	150		150
TY Exports	50	50	150	150		150
Feed and Residual	5,100	4,900	5,550	5,700		5,700
FSI Consumption	900	900	900	950		900
Total Consumption	6,000	5,800	6,450	6,650		6,600
Ending Stocks	697	190	747	450		750
Total Distribution	6,747	6,040	7,347	7,250		7,500
1000 HA, 1000 MT, MT/HA						

	2010/2011		2011/2012		2012/2013	
	Market Year Begin: Sep 2010		Market Year Begin: Sep 2011		Market Year Begin: Sep 2012	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	490	490	450	450		505
Beginning Stocks	768	725	543	400		190
Production	3,600	3,600	3,600	3,600		4,200
MY Imports	500	500	500	500		300
TY Imports	500	500	500	500		300
TY Imp. from U.S.	10	10	0	0		50
Total Supply	4,868	4,825	4,643	4,500		4,690
MY Exports	25	25	10	10		20
TY Exports	25	25	10	10		20
Feed and Residual	3,400	3,500	3,400	3,400		3,500
FSI Consumption	900	900	900	900		900
Total Consumption	4,300	4,400	4,300	4,300		4,400
Ending Stocks	543	400	333	190		270
Total Distribution	4,868	4,825	4,643	4,500		4,690
1000 HA, 1000 MT, MT/HA						

Rice, Milled Turkey	2010/2011	2011/2012	2012/2013
	Market Year Begin:	Market Year Begin:	Market Year Begin:

	Sep 2010		Sep 2011		Sep 2012	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	105	105	105	105		106
Beginning Stocks	321	338	312	368		243
Milled Production	502	450	502	450		516
Rough Production	749	750	749	750		770
Milling Rate (.9999)	6,700	6,000	6,700	6,000		6,700
MY Imports	313	424	300	250		220
TY Imports	300	424	300	250		220
TY Imp. from U.S.	74	212	0	130		120
Total Supply	1,136	1,212	1,114	1,068		979
MY Exports	94	94	95	75		80
TY Exports	90	94	95	75		80
Consumption and Residual	730	750	750	750		750
Ending Stocks	312	368	269	243		149
Total Distribution	1,136	1,212	1,114	1,068		979
1000 HA, 1000 MT, MT/HA						

Rice, Milled Turkey	2010/2011		2011/2012		2012/2013	
	Market Year Begin: Sep 2010		Market Year Begin: Sep 2011		Market Year Begin: Sep 2012	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	105	105	105	105		106
Beginning Stocks	321	321	312	292		249
Milled Production	502	502	502	502		516
Rough Production	749	749	749	749		770
Milling Rate (.9999)	6,700	6,700	6,700	6,700		6,700
MY Imports	313	313	300	300		220
TY Imports	300	300	300	250		220
TY Imp. from U.S.	74	74	0	0		120
Total Supply	1,136	1,136	1,114	1,094		985
MY Exports	94	94	95	95		80
TY Exports	90	90	95	75		80
Consumption and Residual	730	750	750	750		750
Ending Stocks	312	292	269	249		155
Total Distribution	1,136	1,136	1,114	1,094		985
1000 HA, 1000 MT, MT/HA						