Foreign Agricultural Service
GAIN Report
Global Agriculture Information Network

Required Report - public distribution

Date: 6/19/2001

GAIN Report #TU1027

Turkey

Planting Seeds

Annual

2001

Approved by:
Susan R. Schayes, Agricultural Counselor
U.S. Embassy, Ankara
Prepared by:
A. Unal Sarigedik, Agricultural Specialist

Report Highlights:

Local seed production is not expected to be able to meet demand for the foreseeable future. Vegetable, hybrid corn, cotton, and fodder crop seeds as well as seed potatoes are expected to be imported through the medium term. Trade statistics indicate substantial increases in imports of vegetable, hybrid sunflower, rice, fodder crop and grass seeds while imports of wheat, hybrid corn, cotton seed and seed potatoes decreased in 2000. The Ministry of Agriculture maintains tight controls on trials of transgenic seeds and has not yet approved any for commercial production.

Includes PSD changes: No
Includes Trade Matrix: No
Annual Report
Ankara [TU1], TU

Executive Summary

The Turkish seed industry has seen significant improvements since the 1980's, but has not reached its desired level of development. The private sector, coordinated through an industry association, is responsible for the industry's development. Government-run companies focus on production of seeds for bulk commodities, while private companies produce seeds for both bulk commodities and higher value crops. Seed production and consumption are both projected to continue to increase during the next few years in response to growing demand.

Local seed production is not expected to be able to meet demand for the foreseeable future. Vegetable, hybrid corn, cotton, and fodder crop seeds as well as seed potatoes are expected to be imported through the medium term. Trade statistics indicate substantial increases in imports of vegetable, hybrid sunflower, rice, fodder crop and grass seeds, while imports of wheat, hybrid corn, cotton seed and seed potatoes decreased in 2000. The total value of imports decreased slightly due to the economic crises. All exports and most of imports were done by the private sector.

The GOT supports the use of high quality seeds by subsidizing their production and use. The GOT announced a new seed subsidy program for domestically produced seeds in 2001. Hybrid tomato and hybrid cucumber seeds as well as seeds for pulses were included into the new subsidy program while hybrid sunflower seed and seed potatoes were taken out of the old program.

The membership in the UPOV (international seed association) has not been finalized due to delays in adoption of the new Turkish Variety Protection and Control Law.

There has not been any significant development on production and distribution of transgenic (GMO) seeds.

Production

Ninety-three private companies and thirty-one public sector entities currently produce, import, procure, or distribute seed in Turkey. Ownership of the private companies ranges from totally Turkish-owned to a combination of Turkish and foreign joint ventures and totally foreign-owned and operated companies. Almost all private seed companies share one common characteristic, and they have foreign backing for their technological needs.

Most major private seed companies are members of the Turkish Seed Industry Association (TURK-TED), which assists member companies with studies on seed production, certification, storage, packaging, distribution and variety breeding. TURK-TED has 47 members. The General Directorate of Agricultural Enterprises (TIGEM-the State Farms) is the only public member. TURK-TED's members account for about 90 percent of all private sector seed production. Privately owned companies produce about 100 percent of the hybrid corn, hybrid sunflower, and vegetable seed and seed potatoes produced in Turkey. Additionally, about 23.4 percent of cotton, 52.7 percent of fodder crops, 97.4 percent of soybeans, 13.5 percent of wheat and 13.3 percent of barley were produced by the privately owned companies in 2000.

Public seed companies generally produce seeds for bulk commodities, including cereal, cotton and fodder crops, while private companies produce seeds for both bulk commodities and high value crops. The share of privately produced seeds for almost all crops, except barley, increased significantly in 2000.

Certified seed production realization for 2000, program for 2001 and projections for 2002 in Turkey are provided in Table 1:

Table 1. Certified Seed Production Realization for 2000, Program for 2001 and Projections for 2002 (MT)

Type of Seed	2000 1/	2001 2/	2002 3/
Wheat	116,083	305,696	310,000
Barley	19,203	30,360	35,000
Hybrid Corn	11,976	14,876	15,000
Paddy Rice	1,769	3,973	4,000
Sunflower (Hybrid)	2,762	2,808	3,050
Sunflower (Vinimic)	180	100	400
Soybeans	782	920	2,000
Peanuts	0.19	0.19	n.a.
Sugar beets	4,387	4,244	n.a.
Potatoes	37,141	160,183	200,000
Cotton	5,056	5,016	1,000
Cotton (Delinte)	10,564	13,535	17,000
Chick peas	730	1,335	1,400
Dry beans	45	46	50
Vegetables	855	1,678	2,600
Sesame	1.2	0.9	n.a.
Alfalfa	446	735	850
Sainfoin	621	755	900
Vetch (Hungarian)	461	1,239	1,800
Vetch (Ordinary)	1,425	1,859	2,200
Sudan grass	10	10	30
Sorghum x Sudan grass	1	0	10
Fodder beets	0	20	50
Fodder wheat crops	303	650	1,100
Total	214,783.4	550,039.1	598,400.0

1/ Realization

2/ Program
3/ Projection
n.a. Not available
Source: The General Directorate of Agricultural Production and Development (TUGEM), The Ministry of Agriculture and Rural Affairs

For the last fifty years, the General Directorate of Agricultural Enterprises (TIGEM-the State Farms), has been the major government organization carrying out seed propagation and distribution. Even though its responsibilities have recently been diminished, TIGEM is still a significant producer of cereal, cotton and fodder crop seeds. Table 2 provides the total quantities of seed (certified at all levels plus controlled) prepared and distributed by TIGEM in 2000.

Table 2. The Quantities of Seeds Distributed by TIGEM in 2000 (MT)

Type of Seed	Distributed
Wheat	69,885
Barley	14,659
Corn (Hybrid)	28.5
Corn (Composite)	332
Sunflower (Hybrid)	9.2
Sunflower (Composite)	78.1
Cotton	509.5
Paddy rice	185.8
Dry beans	23.5
Chick peas	150.2
Vegetables	1.8
Sainfoin	729
Alfalfa	232.3
Vetch	873.7
Sudan grass	12.3
Various pasture and meadow	25.2

Source: The General Directorate of Agricultural Enterprises (TIGEM),
The Ministry of Agriculture and Rural Affairs

Consumption

Although seed use is reported to have decreased in 2001 due to the economic crisis, seed consumption is expected to continue to increase in the future in response to growing demand, particularly for greenhouse vegetable production. In addition, demand for hybrid corn (especially for silage), hybrid sunflower and fodder crop seeds are expected to continue to increase in response to an increase in demand for poultry and livestock and vegetable oil.

Trade

Domestic seed production is not sufficient and is not expected to increase adequately to meet demand in the medium term. Vegetable, hybrid corn, hybrid sunflower, cotton, and fodder crop seeds, as well as seed potatoes, are among the seeds that Turkey is expected to continue to import at significant levels for at least the next three to five years. From time to time and depending upon supply and demand, other seed types may be imported on a temporary basis.

According to Ministry of Agriculture (MARA) data, Turkey imported about 1,161,531 MT of seed worth about USD 71 million and exported about 43,824 MT of seed worth about USD 12.5 million in 2000. Although the overall quantity of seed imports has been decreasing in recent years, value has continued to increase. In 2000, however, the value of imports was fell slightly, which is generally attributed to the economic crises which started in November 2000. About 90 percent of the corn seed is imported from the United States. Israel and the Netherlands are the leading exporting countries of vegetable seed for greenhouses. Some vegetable seed for field production is also imported from the United States.

Vegetable, hybrid sunflower, rice, fodder crop, and grass seed imports increased significantly in 2000, while imports of wheat, hybrid corn, cotton seed and seed potatoes decreased. Wheat, cotton, hybrid sunflower, vegetable, fodder crops, and grass seed exports increased in 2000, while exports of hybrid corn, and barley seeds decreased. TIGEM has been the only public company involved with seed imports and exports in recent years. TIGEM imported only 10 MT of wheat seed from Italy but did not export any seed in 2000. All other international trade was conducted by private sector companies. Turkey's seed imports and exports for 2000 are presented in Table 3 and Table 4, respectively.

Table 3. Seed Imports in 2000 (MT)

Type of Seed	**Imports**
Wheat	892
Corn (Hybrid)	2,694
Paddy Rice	45
Cotton	436
Sunflower (Hybrid)	49
Potatoes	15,524
Fodder crops (total)	254
Grass (total)	2,048
All vegetables (total)	1,139,589
Grand Total	1,161,531

Source: The General Directorate of Agricultural Production and Development (TUGEM), The Ministry of Agriculture and Rural Affairs

Table 4. Seed Exports in 2000 (MT)

Type of Seed	**Exports**
Wheat	3,715
Corn (Hybrid)	2,418
Cotton	455
Sunflower (Hybrid)	2,128
Fodder crops (total)	22
Grass (total)	31
All vegetables (total)	35,055
Grand Total	43,824

Source: The General Directorate of Agricultural Production and Development (TUGEM), The Ministry of Agriculture and Rural Affairs

TIGEM, which produces nearly 95 percent of the certified cereal seeds, made a request for technical assistance and wheat seed sources from the United States.

Policy

General Agricultural Policy

The GOT subsidizes agricultural inputs, including seeds, irrigation, fertilizer, and producer credit and also provides production incentives through high procurement prices. However, the policy is changing and the current GOT government has made a commitment to reduce subsidies over time. In the original letter of intent which was provided under the IMF stand by agreement, the GOT acknowledged that existing agricultural support policies were not the most cost-effective way of providing support to poor farmers. They distort resource allocation by distorting market price signals, tend to benefit rich farmers more than poor ones, and lack coherence -given the fragmentation of the policy making process in this field among several ministries and public institutions. Above all, they have become quite burdensome to the tax payers with an average cost of about three percent of GNP in recent years.

The componnents of the reform program include phasing out existing support policies and replacing them with a direct income support system targeted at poor farmers. The direct income support system will be based on a farmers registration system which is still being developed. The major principles which will be used to administer the support policies include:

--- The spread between support prices and the projected world market prices should be no more than 35 percent of the projected C.I.F. world price. To reduce the volume of purchases of grains, TMO will announce domestic sales prices which would be no less than the procurement price of TMO plus storage costs.

--- The GOT will gradually phase out the credit subsidy to farmers by keeping the amount of loans constant.

--- The subsidy ratio for fertilizer and other inputs would be reduced by keeping the subsidy constant in nominal terms.

The GOT continues to work on two major agricultural projects --these are Southeastern Anatolia Project (GAP) and Livestock Development Project (LDP), both of which are expected to have a significant impact on seed demand. Funding of these projects, however, are far from being sufficient due to the economic crises.

Seed Production Policy

Seed Law Number 308 2qs adopted in 1962 and placed all seed production, importation and pricing under government control. Since 1982 many revisions and amendments have been made to encourage greater privatization as well as to regulate the importation, production, procurement, certification and distribution of high quality seeds. The Law is considered outdated by both the industry and GOT officials and, as a result, a commission composed of both of these groups has started to study and update it. Due to the nature of the review, it may take several years before a new Law is adopted.

The GOT supports the use of high quality seeds by subsidizing seed production through credit and lower seed prices. The GOT announced a new seed subsidy program for 2001, which replaced a three year old program Hybrid sunflower seed and seed potatoes have been removed from the old subsidy program. Seeds of peas, dry beans, chick peas, hybrid tomatoes and hybrid cucumbers were included into the new one. Under the old program, subsidies were available for both locally produced and imported fodder crop seeds. Under the new program, subsidies are only available for locally produced fodder crop seeds. There are only minor changes in the amount of subsidies provided in the new program. Since the rate of inflation has been running around 50-70 percent a year for the last three years, the importance and the cost of the subsidy program have been significantly reduced. Table 5 presents 2001 seed subsidies by kilogram.

Table 5. Seed Subsidies by Type in 2001

Type of Seed	Subsidy (TL/KG)
Hybrid Tomatoes	300,000,000
Hybrid Cucumbers	10,000,000
Alfalfa	500,000
Peas	200,000
Dry beans	150,000
Paddy rice	100,000
Soybeans	100,000
Cotton	100,000
Chick peas	100,000
Sainfoin	100,000
Vetch	100,000
Sudan grass	100,000
Sorghum x Sudan grass	100,000
Fodder beets	100,000

Source: Official Gazette dated April 11, 2001
USD 1.00 is about T L 1,100,000

Table 6 provides aggregate subsidy expenditures by seed type in 2000. Subsidy expenditures were higher in 2000 compared to 1999, due to significant increases in cotton seed and minor increases in fodder crops seed and seed potatoes, even though they were lower for all other seed types, including for hybrid sunflower, soybeans and rice.

Table 6. Seed Subsidy Payments in 2000

Type of Seed	Subsidy Expenditures CY 2000 (TL Billion)
Cotton	1,083.6
Sunflower	834.7
Potatoes	310.1
Paddy rice	82.8
Soybeans	21.1
Alfalfa	9.3
Vetch	0.1
Sorghum x Sudan grass	10.7
Sudan grass	0.3
Fodder beets	2.2
Total of fodder crops	22.6
Grand Total	2,355.0

Source: The General Directorate of Agricultural Production and Development (TUGEM), The Ministry of Agriculture and Rural Affairs

Plant Varietal Protection

On Sept 26, 1994, The Turkish Government published a Variety Protection and Control Decree to better regulate local seed production, certification and distribution and issued implementing regulations.

Although Turkey plans to join the international seed association, UPOV, its membership has been delayed due to discrepancies between the above-mentioned Turkish Decree and UPOV Regulations. A study for the new Variety Protection and Control Law was completed by the Ministry of Agriculture and sent to the Prime Ministry last year. The Prime Ministry, which was expected to send the draft to the Parliament in the fall, has not done so yet because of its heavy workload of the Parliament and new priorities stemming from the economic crises. Industry sources do not anticipate significant developments in this area in 2001.

Import Tariffs
The 2001 Customs schedule was published on December 31, 2000. As far as seeds are concerned, there were no significant changes with the exception of a reduction for flax fiber seeds from 20 percent to 16 percent.
Table 7 presents the current rates of duties on various seed imports.

Table 7: Import Duties on Seed Imports

Type of Seed	EU & EFTA Countries (%)	Other Countries (%)
Cereal seeds (except rice)	0	0
Rice seeds	10	12
Sunflower seeds	0	0
Soybean seeds	0	0
Peanut seeds	20	20
Rapeseed	0	0
All other oil seeds, inc. cotton, sesame, safflower, palm and mustard	4	4
Hemp fibre seeds	4	4
Flax fibre seeds	16	16
Tea seeds	4	4
Sugar beat seeds	2.4	3.9
Flower seeds	4	6
Forest tree seeds	4	6
Fruit tree seeds	4	6
All other planting seeds (12.09), including all vegetable and fodder crop seeds	19	21

Source: Official Gazette, December 31, 2000

Although Table 7 denotes import duties for seeds, since 1993 the Ministry of Agriculture has had the right to suspend import duties, if those seeds are considered necessary. MARA officials stated that almost all seeds, except flower and ornamental plant seeds, are currently being imported duty free. Flower and ornamental plant seeds for propagation are also being imported with zero duty. Importers who import flower and ornamental planting seeds for commercial purposes (e.g., reselling) have to pay the duties.

Non Tariff Issues
Seed imports are restricted to those companies which produce, procure, and market seeds domestically (including the Farmers' Union, Agricultural Credit Cooperatives and Agricultural Sales Cooperatives). The Ministry of Agriculture justifies this policy as a means of encouraging investments in the domestic seed industry, since most private seed companies have acquired their capital and technical expertise from joint ventures with international firms. Additionally, importers must have an import license from the Ministry of Agriculture. Before seeds may be imported, they must be grown locally on trial plots and approved by the Ministry. A few companies have tried this with GMO cotton and corn seed. Although tests results have been reported as overwhelmingly positive, these firms are finding it difficult to receive approval to expand production beyond the initial test plots.

Last year, the Ministry of Agriculture sent a letter to the seed industry companies and indicated that seed companies should organize their 2001 programs in way which would allow them to meet all of their seed needs through domestic production. Most seed companies and the Turkish Seed Industry Association (TURK-TED) were concerned about the apparent impracticality of this requirement. They lobbied heavily against the proposal which was eventually discarded.

Last year, the Ministry issued new requirements for seed potatoes and restricted imports based on concerns about several pests including "spongospora suppterena". The tolerance level for this disease was set at a maximum five percent by weight and ten percent of surface area. Companies which had invested in potato production to help development of Turkey's potato seed industry (and had discontinued potato imports), reported that reduced seed imports could lead to a serious shortage of seed potatoes for the next crop season unless the limits were raised. They also questioned the Government of Turkey's commitment to encouraging new foreign investments in the agriculture sector. Compromises were reached and a few companies reported that their imports had resumed.

Genetically Modified Organisms (GMO's)
There have been no new significant developments on this issue during the last year.
Production of transgenic (GMO) seed varieties has been discussed in Turkey since 1996, with conflicting views on the issue. Some U.S. seed companies started producing GMO corn, cotton, and potato seeds in Turkey several years ago. Controversies arose three years ago when the companies tried to register the varieties. As a result, in 1998 the Ministry of Agriculture issued a regulation which restricted GMO trials and requires that all trials involving transgenic materials be carried out at MARA research institutes. The regulation was revised on March 25, 1999. Two other regulations are still being developed including one which applies to registration of GMO's and a second which applies to distribution and release of GMO's in the environment and market place. MARA officials reported that they were planning to adopt a Canadian-styled model for registration of GMO seeds.

The Government charges USD 20,000 for each trial's variety and location. The cost of the trial and, even more important, restricting the trial to only one location disturbed seed companies officials who believe that limiting trials to one location will increase the likelihood of the research being incomplete and at best will cause at least another year of delay. Two years ago, TURK-TED, the Turkish Seed Industry Association, asked MARA officials to increase the number of locations and reduce the cost of trials, but they have not yet received a response. On the other hand, the results of GMO corn and cotton trials have not been achieved and/or announced. Trials on seed potatoes were pulled back.

Export Subsidies

There is no direct subsidy on seed exports. However, there are indirect subsidies on exported seeds to the extent that their production and processing costs are reduced with use of subsidized inputs and credit.

Marketing

Several U.S. seed companies, including Pioneer, Monsanto, Delta Pine, Lamb Weston are established in Turkey. These companies generally import parent seed for local propagation with most of the production is sold domestically. Depending on local market conditions, surplus production may be exported, usually to Middle Eastern and European markets.