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# Turkey's Agricultural Economy in Brief

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ERS-FOREIGN 298

FOREIGN REGIONAL ANALYSIS DIVISION

APRIL 1970

**ABSTRACT:** This report describes recent trends in Turkish agriculture, trade, and economic planning. Cotton, tobacco, and filberts remain leading exports, while wheat needs--the prime food staple--are satisfied by domestic production and imports. The United States receives most of the Turkish tobacco exports while supplying most of Turkey's import requirements for wheat, fats and oils, and feed grains. The continuing modernization of farming technology, greater use of fertilizers, and the introduction of higher-yielding plant varieties have improved the agricultural picture. Though agriculture remains dominant in the Turkish economy, government efforts to step up industrial development through 5-year planning programs continues. The GNP growth target of 7 percent is being achieved.

**KEY WORDS:** Turkey, agricultural production, trade, wheat, cotton, tobacco, agricultural statistics.

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## SUMMARY

Turkish agriculture contributed \$2.3 billion to the country's economy in 1968, accounted for 90 percent of its total exports, and involved two-thirds of the population. In the last few years, Turkey has made much progress in its agricultural development; agricultural exports have steadily increased, amounting to \$433 million in 1968. The major farm exports are cotton, tobacco, and filberts. Agricultural imports have declined. In 1968, for example, they were valued at \$28 million, about one-half the 1964 value. In 1967, a record-high wheat harvest called for a cutback in grain imports and, consequently, a decrease in total agricultural imports. Although no wheat imports were required in 1967 and 1968, lower crop yields in 1968 and 1969 necessitated the importation of over one-half million metric tons of wheat yearly.

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Since the total land available for cultivation has about reached its limit, production will be increased chiefly by improving yields. Towards that goal, Turkey is implementing plans for more extensive use of modern technology. The introduction of new high-yielding wheat varieties has improved the breadgrain outlook. Cotton production continues to increase as greater productivity is achieved. Tobacco production in the 1960's has risen with an expansion of area, but with a decline in yield. Both cotton and tobacco, Turkey's first and second agricultural export items, have found some difficulty competing on the world market.

## THE PEOPLE

Turkey's population increased from 18.8 million in 1945 to 34.4 million in 1969. It is increasing by about 2.6 percent, or an

\*This publication updates ERS-Foreign 97 of the same title, dated September 1964.

72

778

772





additional 1 million persons annually. Population density is 114 persons per square mile and about 160 persons per square mile of cultivated land. Twice as many people live west of a line joining the cities of Adana and Samsun, roughly the east-west center of the country, as east of it. Yet the birth rate is the same for both areas. Turkey's population is 98 percent Moslem, with the remainder Christian (Greeks and Armenians) and Jewish. There are 2 million Kurds, constituting an ethnic and linguistic, but not religious, minority. Racially, the Turkish people are an intermixture of Mediterranean and Armenoid peoples. The Turkish language, which is of central Asian origin, was written in Arabic script until the rise of Ataturk, who Romanized it in 1928.

## THE LAND

### Physical Characteristics

Turkey has an area of 296,500 square miles, about the size of Texas and Louisiana combined. It is contiguous to six nations--Greece, Bulgaria, the USSR, Iran, Iraq, and Syria--and is bounded by three seas--the Mediterranean, the Aegean, and the Black. The country lies principally in Asia, east of the Bosphorous; less than 4 percent lies on the European side.

The Anatolia Plateau, which occupies a large part of the country, is the main growing area for Turkey's wheat. It is surrounded by mountains that block off much needed moisture, and is subject to frequent droughts. The coastal strips, both of the Mediterranean and the Black Sea, are the most fertile agricultural areas of Turkey. The country has great differences in soil and climate, allowing for the production of a wide variety of agricultural products. The eastern half of the country is extremely mountainous but provides extensive grazing for livestock.

### Climate

Turkey's climate, which is characterized as "continental," is comparable to that of the United States. It ranges from dry to humid, from subarctic to subtropical. Rainfall is the main factor limiting Turkish grain production. Droughts are common. The interior of the country receives a mean

annual rainfall of only 11 inches. The coastal areas along the Mediterranean and Aegean average over 20 inches of rain, while areas in the Black Sea region receive up to 100 inches annually.

### Land Use

About 70 percent of the country is considered agricultural land. Almost one-third of the total area is used for crops that account for the bulk of Turkish farm production; this proportion (33 1/3 percent) compares with almost 20 percent in 1948. The land has been heavily exploited over the centuries and today, despite conservation efforts, continues to be overgrazed and damaged from much erosion. Table 1 shows the gains in crop and fallow area at the expense of pastures.

The major increase of agricultural land was realized in the early 1950's by plowing up pastureland, which decreased from 49 percent of the total area in 1948 to 42 percent or less in 1955. During this time, 15 to 17 million acres were brought under cultivation, including fallow. Most of this change took place on the central plateau where the new cropland was devoted mainly to wheat. Since 1960, there has been relative stability in the size of the cultivated area and in the division of Turkey's farmland into grain fields, vineyards, orchards, other crop fields, and pastures.

## PATTERNS OF AGRICULTURE

There are about 3 million separate agricultural holdings in Turkey of which two-thirds are less than 12 acres in size, accounting for only one-quarter of the total land in farms. A considerable number are subsistence farms. About 12 percent of the farmers farm more than half of the land, in moderate to large size units of 25 acres or more. There are some very large farms of over 1,200 acres--588 according to the 1963 agricultural census--of which 97 are state farms. These larger farms are located in the southern parts of the country, in the Mediterranean and Aegean regions, and are the most productive in the country. These farms usually grow cash crops such as tobacco, cotton, and citrus.

Table 1.--Turkey: Land use, 1948, 1955, 1960, and 1965

Land use	1948	1955	1960	1965
	- - - - - Million acres - - - - -			
Cultivated area in crops <u>1/</u> .....	27.1	39.6	42.9	43.5
Fallow.....	10.9	16.8	19.7	21.1
Meadows and pastures.....	94.7	76.6	70.8	69.8
Forests.....	25.9	25.7	26.2	26.2
Nonagricultural land.....	33.3	33.3	32.4	32.4
Total <u>2/</u> .....	192.0	192.0	192.0	193.0

1/: Includes vineyards, orchards, olive gardens.

2/ The total area was entered as 191.9 million acres until 1963, when it was increased without explanation to 192.9 million acres. The land unaccounted for is entered as "wasteland, lakes, and marshes," without mention of cities, roads, railroads, rivers, or parks.

Small farms, usually consist of cropland only, with no grazing area. Livestock are grazed on common grazing grounds or on land where villages have grazing rights.

Turkish agriculture suffers from considerable land fragmentation caused by the traditional splitting of land among the males of the family. Less than one-tenth of the farms are in one piece. The 1963 census indicates that many of the smaller farms are split into many pieces with poor field layout.

Most Turkish farmers use age-old traditional methods of farming involving much hand labor. Some new methods and modern technology have been adopted by farmers in the more intensively cultivated areas.

#### PRODUCTION

Agricultural production is dominated by cereals, primarily wheat. On a value basis, nearly one-third of all agricultural production is accounted for by cereals, about two-thirds of which is wheat. One-fifth of total agricultural production is in industrial crops, mainly cotton, tobacco, and sugarbeets. Livestock products account for a little more than one-quarter of the total. Other agricultural products of considerable importance include raisins, nuts, and citrus (table 2).

Cereals.--Wheat is the primary grain and number one food in the country. Although it is grown throughout the country, more than two-thirds of the crop is produced on the Anatolian Plateau, accounting for more than 6 million tons in 1968. Wheat area increased substantially between 1948 and 1955, leveling off at around 20 million acres. Production fluctuates according to the rains, and yields have remained relatively low--the average for the country is about 15 bushels per acre. In 1967, a record 9 million tons were produced.

Mexican wheat.--The most vigorous innovation of recent years in the grain fields in Turkey has been the introduction of semidwarf high-yielding wheats, known as Mexican wheat. These new varieties, which started a revolution in wheat fields, are enjoying increasing influence and favor among the Turks.

The Mexican wheat program was initiated in 1965 when a farmer in Tarsus planted 66 pounds of Sonora 64 wheat. The results were so good that 102 farmers from the Cukurova area planted 60 tons of imported Sonora 64 in 1966. Thus, the program began with early experimentation undertaken by private Turkish farmers. With these favorable results in mind, the Turkish government asked the U.S. Agency for International Development (USAID) Mission to assist in spreading the use of the new varieties. The

Table 2.--Turkey: Production of principal commodities 1948, 1957-59 average, annual 1963, 1967, and 1968

Commodity	1948	Average : 1957-59	1963	1967	1968
	1,000 metric tons				
Wheat.....	3,946	6,486	7,892	9,000	8,400
Barley.....	1,959	2,800	3,900	3,800	3,500
Rye.....	394	718	900	825	780
Corn.....	701	883	990	1,080	1,000
Oats.....	305	478	500	475	450
Rice, paddy.....	90	164	182	200	184
Other grains.....	331	558	532	414	392
Pulses.....	276	289	279	288	293
Potatoes.....	454	1,391	1,600	1,760	1,805
Sugarbeets.....	726	2,651	3,280	5,253	4,716
Tobacco.....	83	121	132	183	162
Cotton.....	67	170	257	396	435
Cottonseed.....	142	304	418	634	700
Sunflowerseed.....	81	106	87	230	230
Citrus.....	60	234	398	541	662
Apples.....	77	192	327	640	700
Pears.....	57	103	152	165	180
Peaches.....	6	71	63	103	99
Figs, fresh.....	119	149	208	232	215
Grapes <sup>1/</sup> .....	1,468	2,452	2,453	3,128	2,900
Filberts, in shell.....	50	88	91	70	130
Raisins.....	70	73	60	93	103
Olives.....	211	370	410	400	775
Milk.....	2,270	3,664	4,059	4,426	4,451
Eggs.....	44	54	67	77	82
Meat.....	150	361	441	455	469
Wool, greasy basis.....	19	43	43	46	47
Production index					
Total agriculture.....	57	100	117	135	136

<sup>1/</sup> Excludes 4 times the raisin figure.

plan devised to accomplish this called for permitting selected growers to have seed, provided they agreed to use a specified package of cultural practices under supervision and inspection of the government and AID officials. About 22,000 tons of seed of selected varieties were imported in 1967, and nearly all was distributed and planted that fall on 425,000 acres. These yielded one-half million tons of wheat when harvested in May-June 1968. In 1969, approximately 1.5 million acres were harvested, yielding about 2.1 million tons. The average yield for the new varieties in the Cukurova area

has been around 50 bushels per acre, compared with native wheat yields in these areas of 15-22 bushels per acre.

Since the benefits of Mexican wheats are manifested only under conditions of high fertility and favorable moisture, future expansion will be at a less spectacular rate. It can also be expected that yields will decrease as the program expands and comes under decreased supervision.

While wheat development is primary, improvement of barley, rice, corn, and



sorghum is also underway. The yield of these may also be increased by adapted research with high-yielding varieties as well as improved production practices.

Cotton.--Cotton production increased from 65,000 tons in 1948 to 435,000 tons in 1968. Between 1948 and 1952, cotton acreage more than doubled to over 1,600,000 acres. Since then, acreage has remained relatively stable, fluctuating between 1,500,000 and 1,800,000 acres. No significant increase in acreage is expected. Any increase in production will therefore be a product of improved yields. In 1948, an acre yielded about 160 pounds of cotton lint. In 1968, 550 pounds per acre were harvested. This dramatic increase has taken place mainly since 1957 and can be attributed largely to two factors: the introduction of new high-yielding upland cotton from Syria and the United States, and increased irrigation and use of fertilizer.

Tobacco.--Tobacco production has also increased, from around 83,000 tons in 1948 to approximately 162,000 tons in 1968. While the increase has been fairly steady, there have been poor crops. During the early 1960's, output fluctuated from a low of 90,000 tons in 1962, when there was a severe infestation of Blue Mold disease, to a record 194,000 tons in 1964. The increase in production that has taken place has been due to expanding area, from 291,000 acres in 1948 to slightly over 700,000 acres in 1968. Yield for these two years declined from 668 to 535 pounds per acre.

#### Other Crops

Sugarbeets became a major industrial crop in the 1950's. Average area in sugarbeets during 1960-64 was three times that of a decade earlier. And despite increased sugar consumption, Turkey had substantial export surpluses of sugar in the 1960's.

Dry beans, chickpeas, and lentils are the main dry legumes produced for food. Also produced are broadbeans, kidney beans, and peas. A great variety of vegetables are produced for local consumption.

Olive oil is the major oil consumed and forms a large part of the country's vegetable oil production. Other major oils produced are cottonseed, sunflowerseed, sesame, peanut, and linseed.

A variety of fruits are produced. Most important are grapes, which are grown in most parts of the country. More than one-third of the crop is dried for raisins, another third is used for pekmez (boiled-down grape juice used for sweetening), and 23 percent is consumed fresh. Only 3.1 percent of the grape crop was used for wine in 1967.

Turkey is the world's largest commercial producer of dried figs, which are a high earner of foreign exchange.

Most of Turkey's citrus is grown in the Mediterranean coastal region under irrigation. This industry is now expanding and plans call for continued expansion as European markets are enlarged. Produced are Jaffa and Washington oranges, seedless tangerines, and lemons.

Deciduous fruits grown are apples, pears, peaches, cherries, quinces, plums, mulberries, and apricots. All but the apricots are domestically consumed.

Turkey produces a variety of nuts--filberts, almonds, pistachios, and walnuts being the most important. Turkey is the world's largest producer of filberts and exports rank third in value of Turkey's agricultural exports.

#### Livestock

The raising and tending of animals is one of the most important agricultural activities in Turkey. Animals are used for motive power and provide significant quantities of dairy products, meat, wool, mohair, and hides and skins. Animal dung is an important fuel in the rural areas. Although Turkey has large numbers of cattle, horses, and donkeys; goats and sheep far outnumber any other type of domestic animal.

The potential for increasing output of livestock products in Turkey is considered good. However, there must be a vast and widespread improvement and modernization of animal husbandry techniques. Range management techniques and forage management are singled out for a special effort in the current five-year plan. The marketing and pricing systems for meat will have to be modernized in any major advance of Turkey's livestock industry.

Table 3.--Turkey: Consumption of fertilizer

Plant nutrient	Average :				
	1954-56	1959	1963	1966	1967
	Metric tons				
Nitrogen (N).....	8,139	21,800	50,099	95,865	138,140
Phosphate (P <sub>2</sub> O <sub>5</sub> ).....	9,558	4,400	58,464	90,720	132,190
Potash (K <sub>2</sub> O) <sup>2</sup> .....	5,599	4,100	574	3,640	8,565
Total.....	23,296	30,300	109,137	190,225	278,895

Most of Turkey's livestock are handled in the traditional village manner. Each day the animals of the village are communally herded to and on all available land located near the village and not used for cultivated crops. In the evening, the animals are driven back to the village compound. The great expansion of cultivated land in the early 1950's encroached upon former pasturelands. Very little supplemental feeding of forage and virtually no feeding of grain is practical for the great bulk of the livestock.

Meat production in Turkey is difficult to estimate. Slaughter house figures are reliable, but the bulk of animal slaughtering is done outside of abattoirs and is not recorded. This is especially true for sheep and goats.

Most of the dairy output comes from small herds which are kept near big cities to supply the urban market. Small herds and flocks are kept by villages to supply their local needs. Much of the milk is processed into butter, cheese, and yogurt. The milk yield per cow is quite low (1,300 pounds in 1966)--compared, for instance, with the U.S. yield of about 9,000 pounds a year.

#### CONSUMPTION OF AGRICULTURAL PRODUCTS

Average caloric intake in Turkey rates favorably with other Middle East countries at about 2,680 calories per day. Turkey has one of the highest per capita cereal consumption rates in the world. About 186 kilograms per year supply about 1,800 calories per day. <sup>1/</sup> Wheat and other grains

provide almost 70 percent of the caloric value of the food supply. Turks also consume a large amount of dry legumes and fruits. Vegetable oil consumption is low by western standards. Consumption of sugar increased throughout the 1950's; Turkish annual per capita sugar consumption is now about 14 kilograms.

As the population shifts to urban areas and incomes rise, the Turks expect their general diet to improve. There should also be a decrease in cereal consumption and an increase in livestock product consumption.

#### AGRICULTURAL INPUTS

##### Fertilizer

Consumption of fertilizers has increased sharply since 1960 (table 3). However, the rate of application is still significantly below the average in most countries with similar climate. In 1966, for instance, chemical fertilizer use was 10.8 kilograms per hectare, only one-sixth the average for Organization for Economic Cooperation and Development (OECD) countries. Turkey's total fertilizer consumption in 1966 was 100 times greater than in 1947. Despite the increase use of chemical fertilizers, plant material and animal manure still remain most important.

##### Farm Machinery

Modern machinery is still beyond the means of most farmers, and they rely heavily on draft animals for farm power. However, there has been a steady increase in use of machinery (table 4).

<sup>1/</sup> FAO-ERS.





introduction and planning of new programs difficult.

## TRADE

### Composition of Trade

Composition of Turkey's trade remained relatively stable in the last decade. Exports, primarily cotton, tobacco, and filberts increased at a rate of approximately 6.5 percent during the First Five-Year Plan. Composition of imports also remained relatively the same--with electric and nonelectric machinery and parts the largest items, representing almost one-third of total imports. Metal and metal products were second, amounting to about 12 percent of total imports. Imports have fluctuated according to the needs of the Turkish industrial complex. In 1968, they reached \$770 million.

### Exports

Between 1963 and 1968, agricultural exports grew at a rate of about 6 percent per year. In 1968, owing to low tobacco, nut, and olive oil exports, total exports dropped 5 percent.

Cotton is Turkey's leading agricultural export and money earner. Production and exports increased rapidly throughout the 1950's and by 1965 cotton replaced tobacco as the leading export. Turkey is the world's sixth largest exporter of cotton. Most of the cotton is exported to the European Common Market countries, the United Kingdom, and other West European nations. Exports in 1968 were four times as large as the 1955-59 average, totaling 224,000 tons. Although slightly less than 50 percent of the crop is exported, exports accounted for \$136 million in 1968.

Tobacco is the second major export. Turkey is the world's leading producer and exporter of "oriental" tobacco which is used in blending and is in demand by countries that grow and use much tobacco themselves, such as the United States.

Tobacco had been the leading export until 1965, when cotton became number one. In 1968, tobacco exports were valued at \$94.8 million, or approximately 20 percent of total exports, compared with \$118 million in 1967. Turkey entered a period of oversupply

beginning in 1965, as a result of the huge 1964 crop. By the end of 1967, Turkey had on hand 147,000 tons of tobacco, just about a year's production.

Close to two-thirds of Turkish tobacco (by value) was exported to the United States in 1967, and about 56 percent in 1968 (table 5). Other markets are West Germany, which took a little less than 7 and 14 percent in 1967 and 1968 respectively. Other importing countries are Czechoslovakia, the USSR, East Germany, and Israel.

Filberts are the third major export item. Turkey is the world's largest producer of filberts. Exports of filberts averaged 113,000 tons in the years 1960-66, nearly all as kernels. Turkey also ranks first as a pistachio producer, but is second in export, following Iran. Exports average 1,650 tons (shelled) in 1962-66.

### Imports

Turkey imports relatively little agricultural produce. In 1967, about \$37 million worth was imported, accounting for 5 percent of total imports. The average for 1964-66 was \$53 million, whereas in 1968 the total was \$28 million.

Major items on the import list are wheat, hides and skins, wool and hair, coffee and cocoa, and fats and oils. Wheat imports are largely determined by the size of the Turkish wheat crop. Owing to a record crop in 1967, little imported wheat was required. Because of a smaller crop in 1968, more than one-half million tons were needed and were imported early in 1969. A still smaller crop was harvested in 1969, which indicated greater wheat imports than a year earlier. Imports of the other temperate agricultural products have generally trended downward because of increased domestic production and to conserve foreign exchange (table 6).

### U.S.-Turkish Agricultural Trade

From the beginning of the 1960-69 decade, total U.S. exports to and imports from Turkey increased rather sharply. U.S. imports of agricultural products also increased. U.S. exports, on the other hand, declined sharply. Moreover, the U.S. share of the market declined, especially during

Table 5.--Turkey: Value of principal agricultural exports  
by leading destination, average 1960-62,  
and annual 1966, 1967, and 1968

Commodity and destination	Average 1960-62	1966	1967	1968
----- 1,000 dollars -----				
Live animals.....	13,476	10,146	9,125	10,664
Cattle, sheep, and goats.....	13,396	10,098	9,038	10,655
Lebanon.....	11,206	5,517	6,462	2,099
USSR.....	944	2,168	--	--
Fruits and vegetables.....	86,577	103,507	137,987	133,198
Fruits and nuts.....	80,193	96,601	131,168	126,034
Oranges and tangerines.....	<u>1/</u> 2,141	2,971	3,422	4,667
West Germany.....	<u>1</u> 651	775	756	1,196
Austria.....	--	682	1,127	1,603
Other citrus.....	714	2,390	3,168	3,924
West Germany.....	--	983	1,187	1,032
Edible nuts, fresh and dried.....	52,078	60,854	91,022	83,522
West Germany.....	20,564	24,464	42,527	40,760
USSR.....	167	7,813	12,640	14,405
United States.....	3,869	2,393	7,652	7,481
Figs, dried.....	5,819	6,550	7,234	6,951
France.....	1,670	2,097	2,162	2,034
West Germany.....	969	1,145	1,329	1,259
Raisins.....	19,106	22,064	22,683	22,805
United Kingdom.....	5,665	6,267	4,646	4,795
USSR.....	--	3,605	5,645	4,817
Vegetables.....	6,384	6,906	6,819	7,164
Pulses, dried.....	6,152	6,188	4,073	4,818
Lebanon.....	2,401	1,782	910	1,945
Italy.....	636	1,095	633	756
Sugar and preparations.....	14,997	8,119	7,770	2,267
Sugar, refined.....	13,700	6,902	6,238	1,453
Israel.....	3,764	4,228	1,944	--
Iraq.....	--	2,547	2,824	--
Feeding stuff for animals.....	10,685	20,935	25,382	20,272
Oilseed cake and meal.....	9,423	19,825	23,430	19,789
Switzerland.....	277	2,158	4,143	5,400
Denmark.....	4,172	4,719	8,014	5,393
West Germany.....	554	731	2,326	1,920
Tobacco, unmanufactured.....	82,913	107,555	117,962	94,805
United States.....	47,370	63,289	75,237	53,242
West Germany.....	9,562	13,264	8,893	13,476

Continued .....



Table 5.--Turkey: Value of principal agricultural exports  
by leading destination, average 1960-62,  
and annual 1966, 1967, and 1968--Continued

Commodity and destination	Average 1960-62	1966	1967	1968
----- 1,000 dollars -----				
Hides and skins.....	6,300	7,613	5,359	5,698
United States.....	1,277	1,372	1,385	1,463
Lebanon.....	402	1,248	274	358
Natural fibers.....	69,753	137,925	140,341	148,045
Wool and mohair.....	11,070	8,403	8,926	8,924
USSR.....	1,579	2,208	4,380	3,542
United Kingdom.....	6,025	1,703	1,202	1,026
France.....	963	882	289	--
Cotton.....	55,398	128,501	128,537	136,114
United Kingdom.....	7,099	25,216	16,422	16,422
Italy.....	16,831	16,105	15,972	10,486
West Germany.....	13,124	16,031	18,393	14,022
Switzerland.....	1,732	11,065	16,853	15,644
Other agricultural exports.....	9,157	19,388	24,723	18,554
Total agricultural exports.....	300,606	415,188	468,649	433,503
Nonagricultural exports.....	48,856	75,271	53,651	63,315
Total exports.....	349,462	490,459	522,300	496,818

1/ 1960.

Source: State Institute of Statistics - Turkish Annual Trade Statistics.

the past 2 years (tables 7 and 8). This resulted almost entirely from reduced shipments of grains, oilseeds, and animal and vegetable fats and oils. Increased domestic supplies were responsible for most of the reduction.

From July 1, 1954, through December 31, 1968, the United States provided Turkey with nearly \$530 million worth of agricultural commodities through the P.L. 480 program. The main commodities were wheat (\$284.8 million), fats and oils (\$145.9 million), feedgrains (\$22.4 million), rice (\$3.5 million), and dairy products (\$2.2 million).

U.S. imports were up during the decade. While there was a small increase in imports of fruits, vegetables and nuts, the main increase was in tobacco.

The United States has been Turkey's major tobacco customer, consistently taking approximately three-fifths of the crop (by value). During 1966-68, the U.S. share of Turkey's exports remained constant at approximately 17 percent.

## AGRICULTURAL AND TRADE POLICIES

### General Aims

The objectives of Turkey's agricultural policy are to meet all domestic food needs and increase agricultural exports to reduce the trade deficit and conserve foreign exchange reserves. While there have been no sweeping policy changes in recent years, two trends can be noted: heavy emphasis on raising the technical level of agriculture and increased price

Table 6.--Turkey: Value of principal agricultural imports  
by leading source, average 1960-62,  
and annual 1966, 1967, and 1968 1/

Commodity and origin	Average 1960-62	1966	1967	1968
----- 1,000 dollars -----				
Grains and preparation.....	42,526	18,985	1,957	--
Wheat.....	41,577	17,376	1,954	--
United States.....	40,802	17,376	1,939	--
Rice.....	619	1,609	--	--
United States.....	--	1,554	--	--
Coffee, tea, cocoa, and spices.....	6,849	2,239	1,524	2,837
Coffee.....	936	2,025	701	1,661
Brazil.....	734	2,025		1,014
Tea.....	5,478	3	--	--
India.....	5,418	3	--	--
Cocoa.....	301	66	823	950
Hides and skins.....	3,073	4,973	5,377	2,646
Hides, cattle.....	--	4,236	3,899	2,329
United States.....	2,207	4,159	3,727	1,008
Rubber.....	2,515	6,330	8,000	7,525
United States.....	--	--	4,939	4,334
United Kingdom.....	--	--	1,310	2,000
Natural fibers.....	16,681	13,108	11,654	9,958
Wool and animal hair.....	16,641	12,938	11,233	9,785
Australia.....	8,634	8,808	7,822	5,535
United Kingdom.....	4,271	2,544	2,112	2,088
Animal fats and oils.....	2,947	5,664	2,186	1,288
United States.....		5,659	2,140	1,189
Vegetable oil.....	7,322	10,212	1,294	252
Soybean oil.....	4,525	2,865	15	182
United States.....	4,525	2,380	--	--
Other agricultural imports.....	92	3,142	4,584	3,717
Total agricultural imports.....	82,005	64,656	36,576	28,223
Total imports.....	533,152	724,581	690,800	770,451

1/ It is recognized that there are some significant differences between the trade tables showing U.S. trade with Turkey and Turkey's total trade. This is because U.S. trade figures are gleaned from U.S. statistics while Turkish trade figures come both from official Turkish trade figures and United Nations statistics.

Source: State Institute of Statistics - Turkish Annual Trade Statistics.

Table 7.--U.S. agricultural exports to Turkey,  
average 1960-62, and annual 1966, 1967, and 1968

Commodity	Average		Value	
	1960-62	1966	1967	1968
: - - - - - 1,000 dollars - - - - -				
Live animals (chicks).....	--	3	5	16
Meat and meat preparations.....	17	18	16	24
Dairy products.....	980	2,180	4,562	6,680
Grains and preparations.....	51,237	21,131	1,792	1,776
Wheat.....	50,050	17,611	834	575
Wheat flour.....	55	1,240	765	1,076
Hides and skins.....	1,963	4,653	3,413	895
Crude rubber.....	--	621	1,521	--
Tallow, inedible.....	850	6,261	444	1,001
Vegetable oils.....	6,916	3,123	1,338	1,333
Soybean oil.....	5,156	2,226	1,315	182
Other agricultural.....	365	191	254	505
<b>Total agricultural.....</b>	<b>62,508</b>	<b>38,181</b>	<b>13,345</b>	<b>12,230</b>
Nonagricultural.....	90,867	136,069	236,231	252,263
<b>Total exports.....</b>	<b>153,375</b>	<b>174,250</b>	<b>249,576</b>	<b>264,693</b>

Source: Foreign Agricultural Trade of the United States.

intervention by the government to keep agriculture viable and competitive.

The general agricultural policy strives to improve the lot of the average farmer by providing technology and education. Successful implementation will increase the standard of living and improve the general nutritional level by increasing livestock and poultry production.

#### Trade Policy

Imports into Turkey are closely governed by both tariff and nontariff controls. For certain items--such as merino wool, coffee, and cattle hides--tariffs usually represent the difference between domestic price and import price. There also are taxes on imported goods, e.g., a pier tax and a stamp duty tax. There are no import levies on P.L. 480 purchases, but government distributing agencies mark up prices--a practice that is approximately equivalent

to setting import levies. Imports of farm products also are restricted by rigid allocation of foreign exchange and licensing. Certain export products such as grain, flour, and margarine are regulated by licensing to assure adequate domestic supplies. Other farm products are not licensed, although some have to be registered to avoid export price fluctuations.

Economic development.--During Turkey's First Five-Year Plan starting in 1963, the growth target of 7 percent annually was almost reached. Annual GNP growth had been less than 5 percent previously. There also was substantial improvement in agriculture. Productivity increased due to high yields, and crop diversification was effective. Earlier, area expansion had been the main way of increasing production.

Expansion planned for the agricultural sector is 4.1 percent per year. Most effort is on increasing productivity of

Table 8.--U.S. agricultural imports from Turkey,  
average 1960-62, and annual 1966, 1967, and 1968

Commodity	Average	Value		
	1960-62	1966	1967	1968
		1,000 dollars		
Meat and meat preparations.....	179	34	10	50
Dairy products.....	2	22	11	51
Fruits, vegetables, and nuts.....	7,365	5,308	6,782	9,648
Pistachio nuts.....	3,012	2,350	3,463	3,941
Filberts.....	1,975	2,232	2,382	3,722
Tea and spices.....	94	598	641	313
Tobacco.....	48,401	60,218	60,462	62,679
Hides and skins.....	1,529	1,830	1,970	1,678
Oilseeds.....	152	345	0	439
Textile fibers.....	1,762	382	372	136
Wool and animal hair.....	1,617	287	114	136
Cotton.....	--	95	258	0
Animal and vegetable materials.....	176	1,542	1,547	922
Opium.....	176	1,404	776	
Vegetable oils.....	386	27	284	96
Olive oil.....	221	26	284	96
Beeswax.....	74	67	128	0
Essential oils.....	--	187	130	293
Other agricultural.....	2,960	--	--	706
<b>Total agricultural.....</b>	<b>63,080</b>	<b>70,560</b>	<b>72,353</b>	<b>77,074</b>
<b>Nonagricultural.....</b>	<b>5,542</b>	<b>8,183</b>	<b>9,426</b>	<b>8,249</b>
<b>Total imports.....</b>	<b>68,622</b>	<b>78,743</b>	<b>81,779</b>	<b>85,323</b>

Source: Foreign Agricultural Trade of the United States.

cereals, promoting industrial crops, and substantially improving a livestock industry. Exports and imports are slated to rise 7 percent annually. Whereas the First Five-Year Plan sought to increase agricultural exports, the Second Five-Year Plan seeks to expand industrial exports. Industry is being oriented toward the export market. Incentives to exporters and export promotion programs are coming into effect. But the lack of foreign exchange will continue to hinder broad expansion based on imported produce or machinery.

Turkey's industrialization is continuing vigorously. Thanks to a diversified investment program, private interests have an increasingly active role in new fields such as motor vehicles, chemicals, tires, and cement. Turkey's association with the European Economic Community (EEC) means more ready access to western ideas and markets. The 170,000 Turkish workers temporarily employed abroad, mainly in Germany, provide and will continue to provide Turkey with new and much needed skills for its developing economy.



The Second Five-Year Plan began in 1968. The planned GNP rate of growth has been kept at 7 percent. If the population continues to grow at a rate of 2.6 percent, then actual growth will be 4.5 percent. And since private consumption is expected to increase by 5 percent, the actual per capita increase will be only 2.5 percent.

Annual rate of expansion of industry is planned at 14 percent--a rate achieved during the last 3 years of the First Plan. Despite the planned industrial expansion and the expected dominance of industry by 1972, about two-thirds of the population will still be occupied with agriculture.

Economic assistance.--Turkey has received substantial aid from the United States. Excluding military assistance, the sum of loans and grants from 1945 through 1967 was \$2.4 billion. Other aid from Free World countries on a bilateral basis totaled \$800 million, making a grand total of \$3.2 billion in the 22 years. Only a small amount of this total--6 to 7 percent--went to agriculture, although agriculture benefited from road construction and general program support. Direct agricultural aid came through AID. AID assistance covers many activities, including the Mexican wheat program, fertilizer activities, irrigation projects, marketing projects, and on-farm water projects.

Turkey became an associate member of the European Economic Community in 1964.

Tariff quotas established in 1965 for tobacco, raisins, and figs have since been raised, while that for filberts remains unchanged. Other commodities too have come under quotas, tariffs, and agreements--all of which are periodically reviewed and renegotiated. The EEC also makes low-interest loans available to assist Turkey in its overall development. Negotiations are now being conducted on the transitional phase of Turkey's association with the EEC, eventually leading to full membership.

Turkey receives aid from the International Development Association (IDA) and the International Monetary Fund (IMF). With Iran, Pakistan, and the United States, Turkey is a member of the Central Treaty Organization (CENTO), which seeks peaceful economic development through cooperative efforts. Turkey also enjoys bilateral trade agreements with the UAR, Israel, and East European countries.

The Food and Agriculture Organization of the United Nations has had a variety of technical assistance projects for agriculture in Turkey, including farm management, farm credit, agricultural cooperatives, production of vaccine for foot-and-mouth disease, export marketing, and agricultural planning. Though Turkey receives no direct economic assistance from OECD, its membership does entitle it to the benefits of guidance and consultative assistance on economic problems.



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