

## SRAFE SDo Not Remove

# AGRICULTURAL ECONOMY

By Michael Kurtzig

ERS-FOREIGN 251

FOREIGN REGIONAL ANALYSIS DIVISION

FEBRUARY 1969

#### SUMMARY

Agriculture has been important in Israel's economy since establishment of the State 20 years ago. Initially smallscale and underdeveloped, Israel's agricul- ANIO 1949, the import-export ratio was 9 ture today is highly advanced and sophisticated. Agricultural production since 1948 has increased sixfold in value (at current prices). Agricultural exports, totaling less than \$20 million in 1948, reached a value of over \$140 million in 1967. Twenty percent of 1967's exports were processed agricultural goods. Onefifth of the country's land area is in crops. Israeli farmers produce more than three-quarters (by value) of the country's food, and agricultural products comprise about one-quarter of total exports.

The need to provide for the rapidly growing population, due mainly to the heavy influx of immigrants in the early 1950's, created many food production facilities. Some production, however, tended to increase relatively faster than consumption, and the possibility of lower prices occurred early. As a result, various policies were instituted by the Government to control production; many of these controls are in effect today, but the Government is gradually eliminating them.

In the early 1950's, imports of food and machinery were large, and Israel's Initial negative balance of trade was created. Such a trade situation continues to be characteristic of Israel. to 1; in 1967, exports were valued at 70 percent of imports.

RECEIVED A policy of import restriction and export expansion was instituted in 1965, following an unusually large trade deficit in 1964.

Substantial effort is being made to increase agricultural exports. During the last 4 years, exports of farm products have on the average amounted close to three-fourths of agricultural imports. New agricultural export products -- such as flowers, avocados, and vegetables geared to the European winter market -are receiving priority, and processed exports continue to increase.

#### POPULATION

Israel's population -- 2.7 million in mid-1968--increased at an annual rate of 3.7 percent between 1960 and 1966. This growth reflects immigration plus

**Economic Research Service** 

U.S. Department of Agriculture

natural increase. From 1966 to 1968, the rate of increase was less than 2 percent annually. Population density in 1967 was about 340 people per square mile, with heaviest concentration in the central and northern districts of the country.

Israel's rural population -- consisting of residents of large and small villages, kibbutzim (collective villages), and other rural settlements, and members of Bedouin tribes -- comprised 18 percent of the total population in 1967. About 88.3 percent of the population is Jewish; 43 percent of the Jewish population are Sabras (Israeli born). Of the remaining population 10.6 percent are Arab (both Moslem and Christian) and about 1.1 percent are Druze and other minorities. Israel is a Jewish state with Islam and Christianity as minority religions. The literacy rate in Israel is above 90 percent, the highest in the Middle East and one of the highest in the world.

#### ECONOMIC SITUATION

Gross national product for 1967 reached \$3.4 million (post-devaluation) and averaged \$1,253 per capita. Annual rate of growth of GNP averaged about 10 percent from 1948 to the middle of the present decade. In 1966 and 1967, the growth rate dropped to 1 and 2 percent, respectively. A sharp decrease in German reparations; a drop in immigration, precipitating a decline in construction; a consequent increase in unemployment; and measures taken to "unheat" the inflation-prone Israeli economy all contributed to the slowdown.

Israel's involvement in the Six-Day War (June 1967) did little to interrupt the economy. Following the war, the economy advanced because of an expansion of the home market for industrial goods as well as for processed agricultural commodities and an increase in industrial exports. Growth of GNP in 1968 was above 10 percent.

Israel has characteristically been plagued with a visible trade deficit. The deficit is partly lessened by invisible earnings from tourism and other services; payments from the World Jewish Community; and reparations from Germany--which still total \$120 million annually to private citizens.

On November 19, 1967, the Israeli Government devalued its currency, following devaluation of the British pound. This was Israel's second devaluation in the last 6 years. The Israeli pound is now equivalent to 28.5 U.S. cents. No great changes in Israel's trade pattern are expected to result from devaluation.

#### LAND CHARACTERISTICS AND USE

Israel is bounded on the north by Lebanon, on the east by Jordan and the Syrian Arab Republic, on the southwest by Egypt, and on the west by the Mediterranean Sea. The country covers an area of 7,993 square miles, about the size of New Jersey. Half of the territory, mostly in the northern and central sections of the country, is cultivated or used to support livestock. The southern half of Israel is mainly desert, but soils in some areas would be suited for some type of farming if water were available.

Israel's climate is characterized by hot, dry, sunny summers and mild, rainy winters marked by occasional snowfalls. In the central area, daily average temperatures range from 45° F. in January to the nineties in July and August. Minimum temperatures occur in January and February and range in the low teens. Temperatures of 110° and 120° F. may occur in May or September-October during a prolonged "Hamssin"--a dry easterly wind.

Annual rainfall ranges from slightly over 32 inches in the north to less than 2 inches in the extreme south. Heaviest precipitation occurs in December and January. Over half the rain falls in winter; most of the rest is divided roughly between spring and autumn. Summers are practically rainless except for a few widely scattered showers.

Most vegetables, citrus and other fruit crops, peanuts, and cotton are grown in the northern area; poultry raising, market gardening, and production of fodder crops for dairy cattle, are also concentrated there. Most of the crops in the northern area are under supplemental irrigation. Grains are generally dryfarmed; in 1967, only 7 percent of the wheat was irrigated. Further south

on the central coast, dryfarming increases and rainfall and irrigation decrease. But generally, the cultivable land is fertile and supports vineyards, barley production, citrus groves, dairy farming, and poultry raising.

Deciduous fruits, grapes, and olives are grown in the eastern hills, which are cooler and less humid than the coastal area in summer and receive more rainfall during winter. This area contains irrigated orchards. Green fodder crops and a few pastures are grown for cattle.

The Jordan Valley is warm and dry in winter, with temperatures between 40° and 60° F. and humidity between 45 and 70 percent. Most of the area lies directly south of Lake Tiberius and receives little rainfall. Nearly all of the valley must be irrigated. Availability of water and the warm temperatures permit intensive farming. Bananas, alfalfa, vegetables, dates, pomegranates, cotton, grapefruit, table grapes, milk, and eggs are all produced in this area.

The Negev occupies the largest part of Israel's area; semiarid in the north, it becomes extremely dry in the south at Eilat on the coast of the Gulf of Agaba. The Negev is hot and dry in summer and cold and dry in winter, with sharp daily and yearly temperature fluctuations. Annual rainfall averages around 8 inches in Beersheba, decreasing to 12 inches toward Eilat. Agriculture in the Negev is dependent on rainfall and is mainly limited to dryfarmed grains. The area's major crops are barley, wheat, and sorghum. In recent years, water piped in from the north has permitted some irrigated cultivation of cotton, sugarbeets, peanuts, and some vegetables. Agricultural potential in this part of the country is extremely limited. It is estimated that the area which could be cultivated, even if water were freely available, would not exceed 15 percent.

Israel has no important natural forestland. An extensive afforestation program is underway which will promote soil conservation and forests will eventually comprise about 5 percent of Israel's land area.

Tables 1 and 2 present use of total land and of cultivated area.

#### PROGRESS IN FARM TECHNOLOGY

Israel has a modern farming system. Since the establishment of the State in 1948, farm mechanization has increased markedly. In the Jewish farming sector, nearly all field operations are mechanized. Use of fertilizers has increased significantly-by about 64 percent between 1954 and 1966.

The establishment of Israel called for rapid development of irrigation to supply the needs of an increasing population. The irrigation program has continuously expanded since 1948; about 40 percent of the arable land was irrigated in 1967. Because Israel has only 4 months of rain in winter and a long, dry summer, the quest for water continues.

While crop area expanded by 50 percent between 1948 and 1961, it increased by only 4 percent from 1962 to 1967. Irrigated area had increased fivefold between 1948 and 1961, but from 1962 to 1967 it increased only about 12 percent. Current policy regarding expansion of irrigated area stresses that water should be used to the optimum near its sources and that only surplus water should be piped south. Parts of the Negev continue to be irrigated with optimum use of present water supplies, and protracted attempts are being made to discover new water sources.

Israel uses between 85 and 90 percent of its available water. One prospect in the search for new sources is desalinization, although this process is still too expensive to provide water for largescale, commercial irrigation.

Cloud seeding is used by the Israelis to produce more rain. A recent innovation, its value cannot be calculated with precision.

Recent comprehensive hydrological studies indicate that Israel's total usable fresh water resources amount to about 1.8 million cubic meters a year.

Table 1 .-- Land use in Israel, 1966

Land category	Area	:	Percentage of total
: : Cropland:	1,000 acres 963	:	Percent 18.8
Land in preparation:	6	:	.1
Forestation:	195 2,030	:	3.8 39.7
Fish ponds::	15	:	.3
Potentially useable for agriculture: Built-on	1,285 161	:	25.2 3.1
Waste and nonagricultural:	459	:	9.0
: Total:	5,114	:	100.0

Source: Statistical Abstract of Israel, 1967.

Table 2.--Use of cultivated area in Israel, 1965/66  $\frac{1}{2}$ 

:	Jewish	: Non-Jewish	:Total			
Use :	farms	farms	Area	Percent of total		
:		1,000 acres -		Percent		
Field crops:	528	164	692	66		
Vegetables, potatoes, and peanuts:	58	12	70	7		
Fruits:	186	31	217	21		
Other crops:	53	5	58	5		
Fallow land <u>2</u> /:	6		6	1		
Total cropped area:	831	212	1,043	100		
Irrigated land	382	9	391	37		

<sup>1/</sup> Cropped area rather than physical area; an area is counted as many times as it is sown. 2/ Newly cultivated land, plowed and prepared for sowing grains the following year.

Source: Statistical Abstract of Israel, 1967.

Table 3.--Tractors and machines in Israeli agriculture, 1948-67

Type	1948	1952	1958	1963	1967
Tractors: Grain combines: Balers: Cotton pickers:	681 261 173	3,133 784 563	5,560 950 795 9	9,750 990 1,045 145	13,155 <u>1</u> / 675 <u>1</u> / 1,015 246

<sup>1/</sup> Decrease due to replacement of low-by high-yielding machines.

Source: Statistical Abstract of Israel, 1967.

Table 4.--Cultivated area under irrigation in Israel, 1948/49, 1958/59 and 1965/66  $\frac{1}{2}$ /

	:		:		:		1965/66		
Use	: 194	8/49	:	1958/59	: Jew	ish :	Non-Jewish:	Total	
	:		:		: farms				
	:								
	: -		-		-1,00	0 acr	<u>es</u>		
Field crops	:	16		104	1	22	0	122	
Vegetables, potatoes, and peanuts		13		60		58	6	64	
Fruits		37		111	1	64	2	166	
Other 2/		8		32		38	1	39	
	:								
Total	:	74		307	3	82	9	391	
	:	_							

<sup>1/</sup> Cropped area rather than physical area; an area is counted as many times as it is sown. 2/ Includes fish ponds, auxiliary farms, nurseries, etc.
Source: Statistical Abstract of Israel, 1967.

It is estimated that total utilization of available water resources would provide enough water for irrigating only about half the potentially productive land.

#### AGRICULTURAL POLICY

Israel is striving to close the trade gap which has plagued the country since its inception. Israeli economic policy aims to increase exports, especially to the EEC and the United Kingdom, and to decrease imports, especially of products that can be locally produced.

Agriculture in Israel has rarely contributed more than 12 percent to the national income or employed more than 17 percent of the labor force. Yet it has always received priority and has rapidly become highly sophisticated and mechanized. Because of increased demand caused by the large influx of immigrants between 1948 and 1960, the Government took steps to accelerate production of food products. As in other sectors in the economy, however, the primary aim was full employment and the cost of production was of secondary importance. By the early fifties, inflationary pressures were felt and the Government was compelled to control prices for a large number of consumer items and services, including the most basic agricultural products. Food prices were given a relatively large weight in the cost of living index. The Government repeatedly gave automatic allowances to farmers to offset increases

in the cost of living, and this stimulated higher farm wages.

Self-sufficiency in poultry products, dairy products, and vegetables was reached by 1962. To avoid surplus production and to maximize use of limited agricultural resources, a system of quotas was introduced for those products which could not be profitably exported. In some cases, the quotas or restrictions have not been effective; for example, a large egg surplus occurred in 1967 and the 1970/71 milk quota was attained in 1967.

Most of the major agricultural products come under some form of regulation involving price fixing, price support, or subsidy. There are many variations in price supports and product subsidies. including a minimum price for dried vegetables grown under contract; a fixed consumer price for citrus; and an export subsidy for fresh citrus, introduced in 1967. Minimum prices for some vegetables and fruits are also maintained through a mechanism of joint funds to which the growers and the Government contribute in varying proportions. Controls on wholesale stocks of some commodities give the Government a trade monopoly on certain products handled on the commercial market, such as wheat, feedgrains, soybeans, imported meat, and imported vegetable oil.

Agricultural producers still consider that the primary responsibility for

parity of farm incomes lies with the Government. This attitude can be seen from the many farmers' demands and the Government actions. Although the Government eventually intends to remove quotas, subsidies, price supports, and market guarantees, they are presently maintained in order to attain two goals: (1) to make agriculture sufficently attractive financially to keep the farmers on the land; and (2) to prevent further inflation.

While the Government has always given favored treatment to agriculture, it is increasingly being urged to give equal treatment to industry. The resulting active encouragement of industrial development has brought about some fundamental changes in Israeli agriculture. By 1966, more than half the income of kibbutzim came from industrial enterprises rather than from farming.

Israel's application for membership to the European Common Market is pending. West Germany and the Netherlands favor her admittance; France does not. Israel produces several commodities--particularly citrus--that compete with those of EEC member countries. Israel does have reduced EEC import duties for certain products.

#### Farm Settlements

A unique development in Israel's agriculture is its cooperative settlements. These evolved as a result of the special needs and challenges encountered by communities of immigrants who were new both to their surroundings and to farming as a profession. The two basic types of cooperatives are the moshav and the kibbutz.

A moshav is a village containing up to 150 farm family units and supported by a strong "multipurpose" cooperative organization. Each family is an economic and social unit, living in its own house and working its own fields. Although each farmer is independent, his social and economic security is ensured by the cooperative structure of the village. The cooperative organization markets the farmer's produce, purchases his farm and household equipment, and provides him with credit and many other services. There are 346 moshavim, varying slightly as to marketing, ownership, and other systems.

A kibbutz, whose membership ranges from 60 to 2,000 people, is a true collective and functions as a single democratic unit. It is based on common ownership of resources and on pooling of labor and income. Each member performs an assigned task but receives no monetary remuneration since all his needs are provided for by the kibbutz. Israel has approximately 230 kibbutzim.

#### Agricultural Organizations

Israeli agriculture is highly organized, and many of the various farm societies wield considerable influence. Among these is the Farmers' Federation, which has a membership of 7,000 citrus growers and independent farmers in some 100 villages. Among its affiliates are: Pardess Syndicate, Israel's largest single citrus grower organization; Mehadrin Ltd., a plantation development company; supply and marketing companies; and associations of wine, fruit, milk, and cotton producers.

Another influential organization is the Citrus Contol and Marketing Board, which comprises representatives of the Ministries of Agriculture, Finance and Commerce, and Industry, and of the growers. The Board controls 110,000 acres of citrus groves, of which over 100,000 are in bearing. It markets the entire citrus crop, both for export and for local markets.

Other agricultural organizations include the Poultry and Egg Production and Marketing Board, the Peanut Production and Marketing Board, and the Vegetable Production and Marketing Board. Eight additional marketing boards are set up on a voluntary basis and are organized mostly as private companies.

Agrexco is a public company responsible for marketing 90 percent of fresh farm exports other than citrus. TNUVA is a cooperative which handles over two-thirds of domestic marketing of all farm produce.

#### AGRICULTURAL PRODUCTION

According to U.S. Department of Agriculture indices of agricultural produc-

Table 5.--Area and production of cotton and cottonseed in Israel, 1955 and 1964-68

				Producti		
Year	:	Area harvested		Cotton lint	:	Cottonseed
	:		:		:	
	:	<u>Hectares</u>	:	Tons	:	Tons
L9 <b>55</b>	:	2,281	;	2,200	:	4,000
.964	:	12,823	:	15,650	:	34,000
.965	:	17,510	:	21,500	:	48,000
966	:	21,931	:	24,950	:	55,000
967	:	29,408	:	28,475	:	62,000
968 (Prel.)	:	30,414	:	33,000	:	70,000
•	:	·	:	•	:	•

tion, total Israeli agricultural production has doubled within the last 10 years. The 1968 index for total food production was 190 (1957-59=100), and for per capita food production, 139. Israel's expanding agricultural economy now provides about 85 to 90 percent of the domestic food requirements.

#### Crops

Israel's most important agricultural products are citrus, other fruits, vegetables, eggs, poultry meat, and milk. A continued increase in production of cotton, flowers, avocados, sugar, melons, and strawberries points to the emphasis being put on cash crops for export. For domestic consumption, Israel produces wheat, barley, sorghum, pulses, hay, and silage; except for barley, these are all partly grown on irrigated land.

The chief grain produced in Israel is wheat. Israel farmers in the past produced only about 12 to 15 percent of domestic wheat requirements. However, during the 1965/66 and 1966/67 seasons, Israeli farmers produced 25 and 58 percent, respectively, of local wheat requirements.

Citrus production for export has made significant progress in the past decade, increasing by more than two-thirds since the 1959/60 season and almost quadrupling since 1949. In the 1966/67 season, over 1 million tons of citrus were produced.

Cotton production continues to increase as more acreage is alloted to this crop (table 5). Since 1964, there has been an uninterrupted increase in total cotton area. In the 1967/68 season, 29,408 hec-

tares were planted to cotton and in 1968/69, over 30,400 hectares. In 1964, almost 95 percent of the cotton area was irrigated. In 1965, the proportion had decreased to 85 percent-partly because of good weather but perhaps more importantly, because growers are realizing that net profit per unit of labor is higher on dryland farms than on irrigated ones.

Production trends of principal farm commodities are given in table 6.

#### Livestock

Israel has traditionally emphasized increasing the output of dairy products and has developed a herd whose milk yield is one of the world's highest. Compared with Israel's highly mechanized milk production, meat production has been considered only a byproduct of the cattle industry.

Within the past 2 years, a mounting surplus of milk and milk products has occurred. A shift toward raising cows for meat has therefore been noted. This shift also results from increased prices of imported meat and restrictions placed on the amount of meat imported. To provide more meat from domestic herds and to reduce the milk surplus, an increased number of milk cows have been slaughtered. More than 40 percent of the income from milk herds comes from beef production, and almost 90 percent of total beef production is from that source.

A census of beef cattle conducted in October 1967 showed a 10-percent decrease from the previous year. The Israeli

Table 6.--Production of principal agricultural commodities in Israel, averages 1954-56 and 1960-62, annual 1949, 1967, and 1968

Commodity :	1949 <u>1</u> /	: Average	•		: : 1968
Commodity	1949 -	:	:	: 1907	: 1900
:				····	<del></del>
:			1,000 metric (	tons	
Vheat::	21	48	49	222	160
Barley::	20	73	39	56	30
Sorghum:	3	19	30	24	30
Sugarbeets:		35	212	330	274
Potatoes:	26	84	93	93	100
:					
Fresh vegetables	80	215	<b>29</b> 0	342	355
Peanuts, unshelled	<u>4</u> /	16	15	13	11
Oranges and tangerines:		336	444	782	925
Gemons	( 273	12	25	44	40
Grapefruit:	ì	54	80	226	265
:	`				
Bananas:	4	17	42	51	48
Cotton:		2	15	29	33
Cottonseed:		4	31	62	70
Apples:	1	3	24	56	60
Grapes:	18	30	63	82	80
:					-
Eggs	14	26	73	84	75
4ilk:	<u>2</u> / 97	200	373	429	435
leat <u>3</u> /:	2	7	23	25	(114
Poultry:	5	18	50	76	(
	,		50	, ,	`

<sup>1/</sup> Statistical Abstract of Israel. 2/ 1948-50 average. 3/ Carcass weight beef, lamb, goat, and other meat. 4/ Less than 500 tons.

Government remains reluctant to commit itself to an increased beef herd. The cost of imported feed for a larger beef herd is a major consideration.

Expansion of the livestock industry is shown in table 7.

#### CONSUMPTION OF AGRICULTURAL PRODUCTS

Israelis consume a little over 2,800 calories per person per day. While total caloric consumption since 1950 has not changed much, the composition of their diet continues to improve. Israelis now consume more meats, eggs, and fruits, and less cereals and cereal products. From 1949 to 1965, the level of calories from meat more than doubled; at the same time, the level of calories from cereals and cereal products dropped 18 percent. Poultry meat, which is abundant in Israel, continues to make up about 50 percent of total per capita meat consumption. The overall diet is

sufficient and well distributed as to starches, proteins, and carbohydrates.

AGRICULTURAL TRADE

#### Exports

Since 1949, exports of fresh farm produce have increased sixfold. Citrus and citrus products continue to occupy the major position in agricultural exports. Exports of citrus have increased about fivefold since 1949, although not uniformly. Until 1953, citrus was almost the exclusive agricultural export. Groundnut exports, which began in 1954, were worth about \$1.5 million in 1967. Since 1954, other agricultural exports have continued to increase so that by 1967 about 20 percent of agricultural exports were noncitrus.

Recently, Israel began making a concerted effort to export new products. A

Table 7.--Israeli livestock numbers, by species, 1948 and 1967

:	1/:		1967	
Specie :	1948 1/	Jewish-owned:	Non-Jewish owned:	Total
:				
:•			Thousands	
Cattle:	34	184	25	<b>2</b> 09
Sheep:	22	124	71	195
Goats:	<u>2</u> / 5	30	$\frac{3}{120}$	150
Horses and mules:	5	14	3	17
Asses:	2			
Camels:			11	11
:				
Laying hens:	1,426	6,800	250	7,050
Geese, ducks and turkeys:	21	1,100		1,100
Beehives	23	65	<u>4</u> / 1	66
:			_	

1/ Jewish-owned only. 2/ Purebred. 3/ Local breeds. 4/ Except primitive hives. Source: Statistical Abstract of Israel, 1967.

case in point is the avocado fruit. Following a few years of experimentation to adapt the fruit to Israeli soil and weather conditions, avocados were marketed. In 1966, close to 1,000 tons were exported to Europe and in 1967 double that amount reached European markets. A substantial increase has occurred in exports of specially grown winter vegetables, such as tomatoes, lettuce, melons, strawberries, peppers, mangos, persimmon, and frozen dates. Cut flowers are also a major new export item. Many of these products are air shipped to European markets and command high prices.

Within this decade, the European Free Trade Association has taken the largest part of Israeli citrus exports -- in 1962 it took 62 percent. While citrus exports to EFTA countries have increased over the years, EFTA's share of Israel's exports has decreased and was 49 percent in 1966/67-with the bulk of the shipments (53 percent) going to the United Kingdom. Exports of citrus to the European Economic Community in 1962 were 30 percent of all Israeli citrus exports. By 1966/67, the share to the EEC was 44.1 percent with slightly more than half of this going to West Germany. About 5 percent of the citrus crop went to other European countries, outside the trade blocs. Two percent went to the United States, and more than 1 percent entered Canadian markets.

Heavy emphasis is being placed on processed citrus fruits. Of the 1966/67 crop, 29 percent was processed--much of it into

orange, grapefruit, and lemon juice for export. Also, grapefruit sections have found a market in the United States. Apples, figs, guavas, peaches, apricots, cherries, plums, and pears are also processed and exported. It is expected that by 1976 there will be space for air shipments of 20,000 tons of farm produce, allowing more Israeli products to reach European markets.

In the marketing year 1966/67, Israel for the first time became a net exporter of cotton. Exports in that year totaled slightly more than 8,000 tons; 1967/68 exports reached 12,204 tons, an exceptionally high volume due primarily to high prices for raw cotton.

A completely new market for Israeli cotton is Canada, which took almost 30 percent of cotton exports in 1967/68. Other customers are the United Kingdom and West Germany.

There are no exports of meats from Israel aside from fresh goose liver to France. Israel's exports of livestock are primarily breeding cattle shipped mostly to Iran and Greece, although live chicks and hatching eggs go to Italy, France, Iran, and some African countries.

#### Imports

Israel is a net importer of farm goods. In 1960 and 1961, agricultural imports averaged some \$103 million, or

Table 8.--U.S.-Israel trade, 1966 and 1967

U.S. export	s to Israe	e 1.	::	U.S. impor	rts	from I	[srael
Commodity	1966	1967	::	Commodity	:	1966	: : 1967
•			::		:		
:		dollars	::		:		dollars
Wheat, grain		6,792	::	Wines	:	435	<b>396</b>
Wheat flour	329	2,257	::		:		
Corn, grain	10,890	7,294	::	Citrons, fresh or	:		
Grain sorghums	16,644	21,070	::	prepared	:	98	105
Barley	931	911	::	Oranges, fresh	:	681	69
	}		::	Grapefruit, fresh	:	24	<b>24</b> 3
Rice, milled	2,518	2,176	::	Other fruits and	:		
Soybeans		21,405	::	preparations	. :	34	23
Soybean oil, crude		3,800	::	-	:		
Other oils and fats		629	::	Olive oil	:	<b>25</b> 3	16
Essential oils	117	92	::	Oils, essential	:	74	177
			::	Vegetables and	:		
Meats	2,699	1,283	::	preparations	:	101	251
Cattle hides		625	::		:		
Cotton, excl. linters		324	::		:		
Tobacco, flue cured		819	::		:		
Beans, dry, ripe		160	::		•		
20010, 019, 12pc		100	::		:		
Fruits and preparations	137	187	::		•		
Nuts and preparations		306	::		•		
Other agri. products		1,355	::	Other agri. products.	. •	618	655
other agri. products			-::	other agra. products.	`:-	<u> </u>	
Total agricultural	85,167	71,485	_::	Total agricultural.	.: <u>_</u>	2,318	1,935
N11	03 450	10/ 25/	-::	Nanaariaultural	:	72 057	94 420
Nonagricultural	82,438	104,334	_::	Nonagricultural	-	13,637	84,439
Total exports	167,625	175,839	::	Total imports	:	76,1 <b>7</b> 5	86,374

19 percent of total imports. During the same period, farm exports averaged \$76 million, or 33 percent of the value of total exports. In 1966 and 1967, agricultural imports were 22 percent of total imports; agricultural exports were 23 percent and 27 percent of total exports, respectively. Agricultural exports including processed products totaled almost \$150 million, and imports totaled slightly more than \$156 million in 1967.

While the Israeli farmer provides 85 to 90 percent of the food needs of the country, Israel imports considerable quantities of wheat and feedgrains, meat, oilseeds, and sugar. Over the last 5 years, Israeli meat imports have averaged about 15 percent by value of agricultural imports (excluding processed agricultural imports). Argentina and the United States have been the primary

suppliers. Imports from Poland, Hungary, and Bulgaria ceased following the break in diplomatic relations in June 1967.

Other major import items are coffee, tea, cocoa, hides and skins, wool and animal hair, vegetables (fresh and frozen), tobacco, cotton, and crude animal and vegetable materials.

#### U.S.-Israeli Trade

The United States is Israel's number one supplier of agricultural products, contributing more than 50 percent of total agricultural imports over the past 20 years. The United States is the primary supplier of wheat, sorghum, corn, and vegetable oils. From 1960 to 1967, Israel imported an average of 249,000 tons of wheat annually, with a high of 322,000

in 1961. The lowest volume--115,000 tons-occurred in 1967, when the wheat crop was the largest in Israel's history. In 1968, the figure is estimated to have reached close to 350,000 tons.

One of the major aspects of U.S. trade with Israel is that part covered by Public Law 480 agreements, which began in 1955. Between 1955 and 1960, more than half of total wheat imports and more than four-fifths of total feedgrain imports from the United States were under P.L. 480 agreements. Imports of U.S. feedgrain averaged 190,000 tons a year during that period. Four-fifths of the edible oils and fats and almost all the frozen beef imported from the United States came under these agreements.

Since the beginning of the sixties, this program has contributed approximately 50 percent of the U.S. feedgrain and wheat exports to Israel. To date, the P.L. 480 program has provided about one-half billion dollars worth of agricultural products to

Israel. Table 8 gives U.S. trade with Israel for 1966 and 1967.

#### AGRICULTURE IN THE OCCUPIED AREAS

Since the June War in 1967, Israel has occupied the West Bank of Jordan, the Gaza Strip, the Golan Hills, and the Sinai Peninsula. The Sinai area is of no agricultural value. In 1967, the Gaza Strip produced 80,000 tons of citrus on 17,000 acres. The Golan area has some grain crops, but most of the farming there is done by some 10,000 Druze who subsist from primitive livestock and fruit production. The most important area under Israeli occupation is the West Bank of Jordan. This is primarily an agricultural area, mainly producing olives, grapes, melons, and guavas. Trade between the West Bank and the main part of Jordan was conducted before the June War and continues.

### UNITED STATES DEPARTMENT OF AGRICULTURE WASHINGTON, D.C. 20250

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE

OFFICIAL BUSINESS