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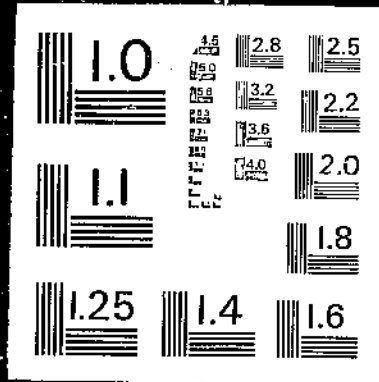
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SPANISH 
AGRICULTURE

ITS COMPETITIVE POSITION

U.S. DEPARTMENT OF AGRICULTURE
Economic Research Service
Regional Analysis Division

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CONTENTS

	<u>Page</u>
List of Tables.....	iii
Glossary.....	v
Summary.....	vi
Introduction	1
Foreign Markets of Spain.....	2
United States-Spanish Trade.....	4
Factors Affecting Spain's Agricultural Production....	8
Physical Factors.....	8
Farm Structure and Land Tenure.....	10
Agricultural Labor Force.....	11
Technological Improvements.....	13
Government Trade Policy	14
Commodities Competitive with U. S. Agricultural Products.....	16
Olive Oil.....	17
Table Olives.....	23
Fresh Fruit and Nuts	27
Oranges.....	29
Almonds and Filberts.....	35
Cotton.....	41
Meat Production.....	47
Poultry and Eggs.....	49
Feed Grains.....	53
Wheat.....	56
Table Grapes.....	58
Raisins.....	61
Outlook	62
Appendix	63
Selected References.....	68

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July 1964

TABLES

<u>Table</u>	<u>Page</u>
1. Spain: Value of principal agricultural exports by country of destination, average 1946-50 and 1951-55, annual 1956 to 1961.....	3
2. U. S. agricultural exports to Spain under specified government-financed programs, total Spanish imports, and gold and dollar reserves, fiscal years, 1954/55 through 1962/63.....	5
3. Value of U. S. trade with Spain, average 1946-50 and 1951-55, annual 1956 to 1962.....	7
4. Spain: Distribution of farm plots by size, 1959.....	11
5. Spain: Total exports of olive oil by destination and percentage of U. S. olive oil imports, average 1946-50 and 1951-55, annual 1956 to 1962.....	21
6. Estimated production of olive oil in the Mediterranean Basin countries, average 1954/55-1957/58, annual 1956/57 to 1963/64.....	24
7. Spain: Area devoted to fruits and nuts and production of specified commodities, average 1946-50 and 1951-55, annual 1956 to 1963.....	28
8. Spain: Exports of oranges by country of destination, average 1946-50 and 1951-55, annual 1956 to 1962.....	31
9. Spain: Production of oranges by principal suppliers to West Europe, other than the United States, average 1946-50 and 1951-55, annual 1956 to 1963.....	33
10. Spain: Almond exports by country of destination, average 1946-50 and 1951-55, annual 1956 to 1962.....	38

<u>Table</u>	<u>Page</u>
11. Spain: Filbert exports by country of destination, average 1946-50 and 1951-55, annual 1956 to 1962.....	40
12. Spain: Average yearly price paid producer per pound for seed cotton by type, No 2 cotton, unginned, 1953 to 1962	43
13. Spain: Number of chickens, specialized and nonspecialized, 1958 to 1962.....	50
14. Spain: Egg prices and margin, annual 1958 to 1962.....	51
15. Spain: Imports of poultry and poultry products from the United States, annual 1956 to 1962	51
16. Spain: Feed grain production, total imports, and amount available for consumption, annual 1956/57 to 1962/63	53
17. Spain: U. S. exports of wheat and certain feed grains to Spain (excluding Canary Islands), average 1947-50 and 1951-55, annual 1956 to 1962	55
18. Spain: Exports of table grapes to principal importing countries, average 1946-50 and 1951-55, annual 1956 to 1962	60

GLOSSARY

- OECD Organization for Economic Cooperation and Development (formerly OEEC). Spain joined July 20, 1959.
- IMF International Monetary Fund. Spain joined September 15, 1958.
- IBRD International Bank for Reconstruction and Development. Spain joined September 15, 1958.
- EEC European Economic Community. On February 9, 1962, Spain requested negotiations be opened toward possible association.
- GATT General Agreement on Tariffs and Trade. Spain joined July 30, 1963.
- EFTA European Free Trade Area.
- NIC National Institute of Colonization. A government organization responsible for planning the irrigation system, land leveling, village construction, and resettlement on land voluntarily given to or expropriated by the government under the land reform program.

Note: All value data are represented in current prices.

Year notations: A crop or fiscal year is denoted by a slash, for example, 1960/61. An average is written with a dash: 1959-61 or 1959/60-1961/62.

SUMMARY

Spain is a relatively poor country, both in natural resources and in economic development. Recovery from the aftermath of depression and Civil War has been slow. Spain began to strengthen its position in the community of nations in 1951 and today, this still highly agricultural country is a member of the OECD, IMF, IBRD, and GATT. Spain's international financial position has been improving since 1959/60 and by the end of January 1964 its gold and foreign exchange reserves amounted to \$1,199 million.

About 29 percent of Spain's total labor force of 11.7 million is actively engaged in agriculture, farming nearly 41 percent of the total land area of Spain; Spain's total area is comparable to the combined size of Utah and Nevada. Spain has a Mediterranean type agriculture. Grain/fallow rotation is used extensively. Grapes, olives, and nuts are widely cultivated, and sheep and goats are raised in large numbers. The large, often underdeveloped estates in the central and southern areas contrast sharply with the many small, fragmented, and intensively cultivated farms in northern Spain. Farming methods are generally substandard compared with most other West European countries.

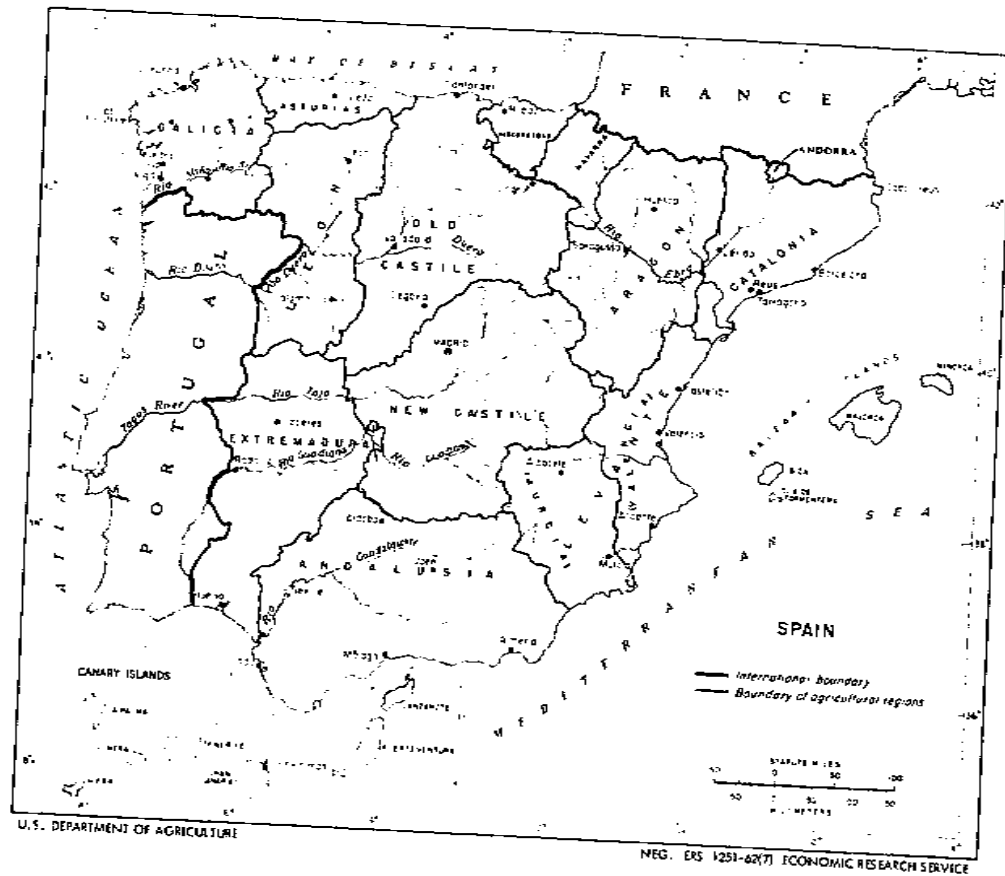
Spain is highly dependent on agricultural exports for foreign exchange earnings. The principal commodities exported are fruits (mainly oranges), wine, olives, olive oil, nuts (mainly almonds), and vegetables. Wheat, rice, and other grains have been imported in years of poor harvest. The most important foreign markets of Spain are in West Europe, primarily the EEC and the United Kingdom. The United States is also an important market.

The potential of Spain as a market for, or as a competitor of, U. S. agricultural products depends on the progressive development of Spain's national economy, and to a large extent on its agricultural sector. In order to stimulate domestic agricultural production and to increase exports the Spanish Government adopted a 4-year economic development plan on January 1, 1964.

Spain is expected to provide increased competition in third country markets for some U. S. agricultural exports, mainly

oranges and other citrus fruits. Spanish dominance of the United Kingdom almond market is expected to continue, partly because of lack of attention from U. S. exporters. U. S. exports of cotton to Spain have declined rapidly, primarily because of the rise in domestic cotton production. Increasing exports of U. S. soybean oil to Spain in the future may be difficult because of Spanish Government policy regulating its use. The United States will continue to export wheat, but only in years of low Spanish production. There appears to be an excellent opportunity for increased exports of feed grains to Spain as livestock production continues to expand. U. S. imports of Spanish olives and olive oil are expected to increase.

Recent improvements in Spain's gold and dollar reserves, and Spain's liberalization of approximately 75 percent of its agricultural imports, provide a good opportunity for the sale of U. S. agricultural products. However, in order to compete, U. S. traders will have to overcome the special advantages of other exporters to Spain; namely, lower production and transportation costs, custom packaging for the Spanish consumer, and availability of credit. It is in the last two areas that the U. S. exporter can make the most gains. Also, the generally high quality and availability of U. S. agricultural products have made them wanted on all world markets.



SPANISH AGRICULTURE--ITS COMPETITIVE POSITION

By Woodrow A. Schlegel, Agricultural Economist
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INTRODUCTION

The economic development of Spain is hindered by semiarid, infertile agricultural land, few navigable rivers, and a lack of high-grade coal and ores. Spain's traditional economic difficulties were aggravated by the world depression following 1929, the Spanish Civil War of 1936-39, the side effects of World War II, and extremely unfavorable weather. When Civil War hostilities ceased in 1939, there were no gold and foreign exchange reserves; productive capacity had deteriorated seriously, and imports were necessary to meet consumption requirements. Economic progress after World War II was much slower in Spain than in other West European countries even though Spain was not an active participant in the conflict. To speed recovery, Spain obtained a loan from the United States in 1953 in return for military and naval bases. This program helped materially to propel the initial economic expansion. Between 1953 and 1958, imports into Spain increased over 50 percent, but exports stayed practically the same. During this time, the peseta lost about half of its purchasing power and the cost of living spiraled. In spite of American aid of about \$200 million a year between 1956 and 1958, Spain's foreign exchange reserves fell by about \$50 million a year and totaled only \$66 million at the end of 1958. Faced with this dangerously low foreign exchange reserve, Spain asked for additional assistance. A loan was obtained through the cooperation of the OEEC (now OECD), the IMF, the U. S. Government, and private banks. In return for this loan, Spain agreed to liberalize its rigidly controlled economy. The result was the Stabilization Program of July 1959 which devalued the peseta by about 40 percent and reduced import restrictions to a large extent. Importers were also given more freedom to purchase on the open market.

The economic plan to liberalize the external economy was effective and by the middle of 1962 some important successes had been achieved. The balance-of-payments surpluses since 1959/60 have been substantial and foreign exchange reserves

totaled \$1,199 million by the end of January 1964. Trade has been progressively liberalized and greater freedom has been given to foreign investment. Receipts from tourism, still Spain's most important foreign exchange earner, reached almost \$475 million in 1962.

On January 1, 1964 Spain launched a new 4-year Development Plan which is expected to give fresh impetus to the economic growth begun in the early 1950's. It will be divided into three sections; one section deals with the overall pattern of Spain's economic development, another with expansion programs for each economic sector, and a third with the actual measures of economic policy aimed at achieving the desired goals.

The new plan calls for the investment of \$5.6 billion over a 4-year period, including \$1.1 billion to be spent on agriculture and irrigation. The objectives are to: Increase yields so that 340,000 agricultural workers may shift to industry; raise production of export commodities by 1967--citrus over 2 million tons, other fruits 2.9 million tons, olive oil 0.5 million ton; provide irrigation for some 300,000 hectares; reforest 364,000 hectares; carry out soil conservation measures on more than 300,000 hectares; consolidate about 1 million hectares; and double the number of tractors to 200,000.

Spain is now a full member of OECD, IMF, IBRD, and GATT.

Foreign Markets for Spain

Spain is one of the countries most dependent on agriculture for foreign exchange. Agricultural products constitute 50 to 65 percent, by value, of Spain's total exports. As a result, in periods of domestic drought or when other emergencies restrict the exportation of agricultural commodities, the Spanish foreign exchange balance suffers severely.

Spain's principal markets for agricultural products have been West European countries, and the United States. Most of the exports have gone to the Common Market countries and the United Kingdom (table 1). Fruits and vegetables have been the most important exports. Olive oil and wine also account for a significant portion of the export list. Cereals, mostly wheat and rice, and other grains have been exported during years of good harvests and imported in years of poor harvests (appendix tables 19 and 20).

Table 1.--Spain: Value of principal agricultural exports by country of destination, average 1946-50 and 1951-55, annual 1956 to 1961

Country of destination	Average 1946-50	Average 1951-55	1956	1957	1958	1959	1960	1961
-----1,000 U. S. dollars-----								
United Kingdom.....	33,801	47,998	45,479	53,332	53,869	56,969	37,866	63,157
West Germany.....	2,042	31,849	22,385	33,590	30,920	44,106	30,577	61,683
United States.....	23,303	25,432	34,242	22,043	27,421	24,907	35,687	41,454
Italy.....	4,101	2,613	2,984	3,442	2,801	6,346	12,451	38,375
France.....	14,900	27,868	16,411	20,039	39,656	18,050	11,129	29,934
Netherlands.....	4,810	8,191	5,346	4,792	9,183	11,477	4,056	14,255
Belgium-Luxemburg....	6,232	8,600	4,382	6,258	7,542	7,741	4,909	11,487
Switzerland.....	9,438	11,423	8,752	12,135	23,096	11,110	7,203	10,143
Norway.....	1,826	5,611	4,038	5,149	5,607	7,046	2,753	5,142
Denmark.....	3,128	5,504	4,513	4,868	5,159	5,871	3,459	4,359
Cuba.....	5,513	8,317	7,893	9,435	9,596	5,917	1,896	2,888
All other.....	15,528	19,009	27,037	34,240	45,534	51,591	167,106	54,745
Total.....	124,622	202,415	183,462	209,323	260,384	251,131	319,092	337,622

Oranges have accounted for about 25 percent of the total value of agricultural exports in recent years. The largest markets are West Germany, France, and the United Kingdom. Olives and olive oil are also important to the Spanish economy as exports. Since 1960 they have averaged \$41 million annually. Olive oil exports alone averaged about \$20 million annually from 1956 to 1959, and increased to \$69 million for 1960 and 1961, about 20 percent of the value of all agricultural exports. However, by 1962 olive oil exports dropped to \$44.4 million.

United States-Spanish Trade

An agreement (Pact of Madrid) was signed in September 1953, beginning large-scale U. S. assistance to Spain. From July 1, 1954, to July 1, 1963, the United States shipped to Spain, under this and other agreements, a total of \$790 million of agricultural products (table 2).

Agricultural imports from the United States since 1953, mostly under Public Law 480, have accounted for a large proportion of Spanish agricultural imports and even a substantial proportion of its total imports. 1/ This aid helped Spain considerably to overcome what would otherwise have been a serious foreign exchange

1/ Title I: Provides for the sale of surplus agricultural commodities, held in stock by the Commodity Credit Corporation, for foreign currencies.

Title II: Allows the use of surplus commodities, held in stock by the Commodity Credit Corporation, for famine relief and other assistance.

Title III: Authorizes two programs. One provides for donations of surplus foods for domestic distribution to eligible recipients and outlets, and for distribution to eligible persons overseas through nonprofit American voluntary relief agencies and intergovernmental organizations. The other program handles the exchange of surplus commodities for strategic and other materials, goods and equipment.

Title IV: Approved September 21, 1959. Provides for long-term supply and dollar credit sales of U. S. agricultural commodities.

Section 402: Authorizes funds to be used to finance the export and sale of surplus agricultural commodities on products transferred under P.L. 480.

Table 2.--U. S. agricultural exports to Spain under specific Government-financed programs, total Spanish imports, and gold and dollar reserves, fiscal years 1954/55 through 1962/63

Item	1954/55	1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	Total
----- Million U. S. dollars -----										
Title I shipments:										
Wheat.....	0	2.6	2.0	0	0	0	0	13.8	0	^{2/} 18.4
Feed grains.....	0	3.5	5.4	0	11.2	5.0	6.6	8.0	0	39.7
Cotton.....	0	8.0	23.6	15.3	27.8	0	22.0	21.2	0	117.9
Tobacco.....	0	2.2	4.0	5.3	3.3	5.5	3.5	1.0	0	24.8
Fats and oils.....	0	45.7	50.6	39.5	50.0	33.6	27.5	0	0	246.9
Others.....	0	1.4	15.3	0.7	1.0	1.0	0	0	0	19.4
Total.....	0	63.4	100.9	60.8	93.3	45.1	59.6	44.0	0	467.1
Title II shipments.....	0	0	0	1	1	1	0	0	0	3
Title III shipments:										
Donations.....	12	17	16	19	6	6	8	11	10	105
Barter.....	1	4	0	1	6	0	7	7	0	26
Total.....	13	21	16	20	12	6	15	18	10	131
Section 402 shipments.....	44	34	26	20	21	12	28	3	1	189
Grand total ^{3/}	57	118	143	102	127	64	103	65	11	790
Total Spanish imports.....	590	715	862	783	871	728	879	1,523	^{4/}	6,951
Imports from U. S.....	98	204	250	196	189	128	268	242	^{4/}	1,575
Agr. imports from U. S.....	67	126	153	110	127	66	157	126	¹³⁴	1,066
Gold and dollar reserves ^{5/}	188	228	155	106	66	227	596	900	1,077	^{6/}

^{1/} Preliminary. ^{2/} Wheat valued at \$4.4 million sold to Spain for resale to Switzerland to finance Swiss goods bought by Spain, not included in the value for Spain. ^{3/} Does not include the cost of ocean transportation.
^{4/} Not available. ^{5/} As of December 31 of each fiscal year. ^{6/} Total not applicable.

problem. In spite of this, Spain's foreign exchange reserves declined to a low level by the end of 1958. However, since the stabilization program went into effect in 1959, Spain's foreign exchange holdings have climbed to the highest level in its history--\$1,199 million at the end of January 1964. As a result, Spain has emerged as an important dollar market.

During 1946-50, U. S. agricultural exports to Spain averaged \$17.1 million, rising to \$154.1 million in 1961 (table 3). However, because of vastly reduced imports of U. S. cotton, wheat, barley, and tobacco, U. S. agricultural exports to Spain declined to \$98.7 million in 1962. At the same time Spanish agricultural exports to the United States increased from a 1946-50 average of \$23.3 million to \$38.9 million in 1962.

Cotton, oilseed products (primarily soybean oil), and wheat and other grain products made up the largest share of U. S. agricultural exports to Spain. In 1962, though, increasing Spanish cotton production was reflected in greatly reduced raw cotton imports from the United States.

Spain is the largest single market for U. S. soybean oil. Total oilseed products represented 37 percent of total agricultural exports to Spain in 1962.

In 1960 and 1961, wheat exports increased sharply and totaled \$11.0 and \$56.0 million, respectively, but declined to \$21.9 million in 1962. Grain and grain preparations (mostly wheat) accounted for 34 percent of the total value of U. S. agricultural exports to Spain in 1962.

While total U. S. shipments of agricultural products to Spain have increased since the beginning of Public Law 480, a relatively small amount had been for cash dollar sales until 1961. Since Spain now has a favorable foreign exchange balance, aid under Title I of P.L. 480 is being curtailed. However, it is expected that aid to Spain will continue for several years and that the provisions of Title IV, P.L. 480, will be sufficient to meet Spain's future needs.

About half of the value of Spanish agricultural exports to the United States in recent years has been accounted for by olives;

Table 3.--Value of U.S. trade with Spain, average 1946-50 and 1951-55, annual 1956 to 1962

Item	Average 1946-50	Average 1951-55	1956	1957	1958	1959	1960	1961	1962
-----1,000 U. S. dollars-----									
U.S. exports to Spain:									
Agricultural 1/									
Oilseed products...	2,165	3,081	53,713	41,092	50,441	46,087	46,426	23,712	46,388
Cotton.....	10,111	34,533	31,441	31,225	48,391	42,936	30,556	24,770	18
Tobacco.....	407	1,939	3,968	5,507	6,583	7,996	0	3,515	44
Wheat.....	1,936	10,637	1,739	896	345	0	11,001	55,975	21,917
Corn.....	2/	18,757	390	17	674	3,042	3,640	9,275	11,659
Barley.....	2/	2/	1,127	5,055	3,312	6,182	4,697	11,095	328
Other.....	2,440	1,113	14,230	19,473	1,802	8,693	16,780	25,691	18,379
Nonagricultural.....	25,341	19,688	94,151	121,504	72,878	65,179	76,289	115,112	134,396
Total exports.....	42,400	89,748	200,759	224,769	184,426	180,115	189,389	269,175	233,129
U.S. imports from Spain:									
Agricultural									
Olives.....	3,759	8,850	14,283	15,254	17,583	14,613	17,533	20,257	20,450
Olive oil.....	2,639	5,702	14,577	2,003	2,805	3,592	7,654	8,760	7,217
Almonds, shelled...	970	951	343	986	2,622	2,255	302	637	138
Wine.....	1,265	811	902	1,042	868	1,000	3,349	1,744	1,800
Vegetables.....	157	463	1,348	533	945	886	728	1,530	1,494
Other.....	14,513	8,655	2,789	2,225	2,598	2,561	6,121	8,526	7,787
Nonagricultural.....	15,394	22,083	24,825	21,831	19,534	32,658	50,581	43,906	51,517
Total imports.....	38,697	47,515	59,067	43,874	46,955	57,565	86,268	85,362	90,433

1/ Does not include Title III, P.L. 480 shipments which amount in million dollars to: 1955=\$16.5 1956=\$22.4
1957=\$18.9 1958=\$20.3 1959=\$3.3 1960=\$9.9 1961=\$15.5.

2/ Less than \$1,000.

they were valued at \$20.5 million in 1962. Olive exports to the United States usually represent three-quarters or more of total Spanish olive exports. Of the numerous other export commodities of agricultural origin, olive oil has averaged about \$6.7 million since 1956 and wine \$1.5 million (table 3).

FACTORS AFFECTING SPAIN'S AGRICULTURAL PRODUCTION

The future position of Spain as a market for, or as a competitor of, U. S. agricultural products depends to a large extent on how successful Spain will be in developing her national economy, and especially her agricultural sector. Farm products must be produced economically to meet international competition and in sufficient quantities to satisfy rising domestic demand if agricultural imports are to be kept at a minimum. Although Spain is one of the largest countries in Western Europe, it is among the poorest agriculturally endowed countries in this region.

Lack of rainfall is the principal limiting factor in agricultural production. This lack not only limits crop yields but also the length of the pasture season for livestock. Irrigation is needed to bring more land into production and to increase the yields of crops now being grown. New irrigation projects are now being undertaken actively by the Government.

Also, much more fertilizer needs to be used, both for food crops and for animal feeds. There is also a need for more agricultural machinery to improve the efficiency of production. Some progress is being made in meeting this need, primarily through the domestic production of tractors and other mechanized equipment.

Physical Factors

Spain is a hilly land with a high plateau (Meseta) occupying the greater proportion of the country. Erosion problems are severe, especially in southern Spain. A large part of the country is semi-arid, and climate varies considerably.

The total Spanish land area of 124.7 million acres is about 41 percent cultivated, at least part of the time. Cereals are grown in every province of Spain, and, including fallow land used in crop

rotation, the acreage devoted to these crops accounts for more than half the arable land. Crops for direct consumption, such as wheat, olives, grapes, and fruits, receive the chief emphasis.

In recent years, Spain has made considerable progress in irrigating new lands. To date about 9 percent of Spain's cultivated land is irrigated. This irrigated area produces all of the rice, most of the sugarcane, sugarbeets, truck crops, citrus fruit, and tobacco, over one-half of the potatoes and cotton, and over one-third of the corn.

Well-balanced crop and livestock farms are exceptions in Spain. Much of the livestock is pastured on natural vegetation which is sparse, especially in summer.

The northern and northwestern coastal area.--This zone has a temperate climate the entire year with abundant rainfall, between 30 and 70 inches annually. Good grassland and meadows support a large number of livestock. Corn, potatoes, truck crops, and some fruit are the main crops. This area is densely populated--132 people per square mile--compared to the population density of 50 people per square mile for all of Spain. The use of modern methods of agricultural production is handicapped by fragmentation of farmland.

The central plateau.--This area is located in the very large and relatively poor region of the Meseta. It has extreme weather variations, with hot, dry summers, severe frosts in winter, and generally low rainfall. It is largely cropped to cereals (principally wheat), pulses, sugarbeets, olives, and vineyards. Despite subsidized producer prices, production tends to be marginal because of dry farming conditions and low yields, with a good crop only once in several years. Fruit trees, cotton, and tobacco are cultivated in the river valleys, where large crops are harvested when irrigation water is available. All kinds of livestock are raised but sheep are the most important.

The east coast.--In this area the climate is warm and usually frost free. Many areas are irrigated and the zone is the richest in Spain for agricultural production. Tree crops--citrus, almonds, peaches, and plums--are important to this area, particularly in the province of Catalonia. Truck crops, rice, grapes, and potatoes are

other important agricultural products. Livestock of various kinds are fairly abundant. Poultry is especially important in the area around Reus. The nearness of European markets has encouraged development of high-value crops. Agricultural techniques are well advanced and tractor use is the highest in Spain.

Southern Spain.--This area is, in general, quite fertile. A mild climate supplemented by rainy winter and spring seasons, enables this area to provide about 75 percent of the total olive oil and over one-half of the fibers produced in Spain. Other crops include wheat, tobacco, grapes, sugar, and potatoes. Citrus, other fruits, and early vegetables grow well on irrigated land. The land on both sides of the Guadalquivir River in the province of Andalusia is the most promising underutilized agricultural area in Spain. With proper drainage it could probably produce high crop yields even without irrigation.

Farm Structure and Land Tenure

Agricultural production in Spain is hampered by the system of landholding. The principal land tenure problems are the predominance of large estates in the south and parts of central Spain, and the excessive fragmentation of small holdings in most of northern and central Spain.

A recent census indicated that only 6 million people own agricultural land in Spain. This land is divided into 54 million parcels (table 4).

Of the 54 million plots, over 90 percent are less than 2.5 acres. Fragmentation of this kind is believed to promote community spirit. However, it leads to arguments over boundaries, pathways, access rights, and water rights. It also prevents adequately combining farming and livestock raising, and hinders mechanization and other modern farming methods.

In the south and central parts of the country large estates are the most typical farming unit. They often impose serious obstacles to efficient use of available agricultural resources because of absentee ownership and the use of labor instead of agricultural machinery most of the time. However, not all Spanish farms above 250 acres are too large to be farmed efficiently.

Many large farms are located in dry-farming areas where a large acreage per farming unit is necessary to provide sufficient returns.

Table 4.--Spain: Distribution of farm plots by size, 1959

Acres per plot	Number of plots	Number of owners
Under 1	41,810,999	2,054,592
1-2.5	6,898,119	1,074,361
2.6-12.5	4,242,344	1,805,012
12.6-25	596,531	552,655
26-125	376,152	401,922
126-250	66,844	49,812
251-620	36,051	27,972
621-1,250	10,175	12,570
1,251-2,500	3,334	6,641
2,501-12,000	1,219	3,706
Over 12,000	117	394
Total	54,041,885	5,989,637

These large estates are either worked with hired labor or contracted out and then subleased into small lots. This has forced the greater proportion of the working farm population to be either landless laborers or tenants on farms too small to afford even a subsistence level of living. Most small farms in Spain are irrigated, at least to some degree. Therefore, in the east and south where several crops a year can be grown on irrigated land, a 12.5-acre farm may be sufficiently large to support a family, while up to 125 acres of dry-farm land may not be enough to provide even a subsistence level of living. ^{2/}

Agricultural Labor Force

The surplus agricultural population, found especially in central and southern Spain, is one reason for the comparatively

^{2/} A recent Spanish study indicated that 12.5 acres of irrigated land or 125 acres of dry-farm land constitute a family-size farm that allows an acceptable level of living in the Spanish environment.

slow rate of agricultural mechanization. According to a population estimate made in December 1961, from preliminary 1960 census data, the agricultural labor force was 4.6 million, or about 29 percent of the total active labor force. This was a decrease of 12.4 percent in the agricultural labor force during the past 10 years. The present composition is as follows:

Farm operators employing labor...	241,208
Farm operators who do not employ labor.....	2,397,885
Farm laborers.....	1,979,618

Of the farm laborers listed above, about 1 million have no fixed employment and work only seasonally. Many of the farm operators (about 1 million) who do not employ laborers are the owners of tiny plots from which they get a meager living.

The Spanish labor force in 1961 was heavily weighted by the agricultural labor force. The breakdown is listed below:

Farmers, farmworkers, breeders, fishermen, hunters, forestry workers, etc.....	4,630,528
Craftsmen.....	3,070,468
Service workers, including sports and recreation (including about 500,000 domestic workers).....	967,813
Salesworkers.....	715,483
Clerical employees.....	672,087
Professionals and technicians.....	480,133
Transport and communications workers.....	471,494
Miners, quarrymen, and related workers.....	182,719
Nonclassified personnel.....	172,788
Armed forces.....	149,849
Managers, officials, and proprietors, excluding farm.....	120,852
	<hr/>
	11,634,214

The official 1960 census also indicated that there were more Spaniards living in urban areas than in rural areas for the first time in history.

In a developing agricultural country like Spain, the lack of nonfarm job opportunities limits urban migration, thereby making cheap labor available to agriculture and preventing rapid adoption of technology.

Technological Improvements

The Spanish Government is attempting to help farmers modernize production methods and increase productivity. However, until recently, greater emphasis was placed on promoting growth and expansion in industry rather than in agriculture.

The number of tractors in Spain rose from about 10,000 in 1950 to 71,077 in 1961. However, this is still only one tractor for every 579 acres of cultivated land. The consumption of commercial fertilizer is still low, especially nitrogen, for which Spain depends mostly on imports. Animal manures are not important sources of plant nutrients in Spain, except in the northwestern provinces. Improvements have been made in protecting plants against disease, use of selected seeds, and livestock raising. The well-organized and efficient extension service, established in 1956, had a staff of 336 persons, 160 offices, and a budget of \$1 million by 1960.

The Government is trying to overcome Spain's major agricultural deficiency--insufficient water--through irrigation, land reclamation, reforestation, and watershed improvement. These projects sometimes raise production in the immediate area, although usually at a high cost. Some projects of the National Institute of Colonization, such as the one at Badajoz, involve not only land reclamation but also the building of entire towns and villages. 3/

3/ For a large-scale project, such as at Badajoz, the NIC announces the availability of a newly developed area ready to be settled. For a man to be selected he must be between 24 and 49 years of age; finished with his military service; an experienced farmer; and in good health. If he is selected the NIC will provide him with a new house, land, some machinery, tools, fertilizer and seed, a mare, a milk cow, and a yoke of work cows. In repayment the farmer must give the NIC whatever female offspring his animals produce in the first 2 years. For 5 years he must turn over 60 percent of those crops--cotton, corn, wheat--that can be readily stored or sold. During his years of sharecropping with the Government he must meet certain farming standards, learn how to irrigate, and follow the advice of a trained Government foreman. He will have 25 years in which to pay for the land and up to 40 years to pay the cost of the house.

GOVERNMENT TRADE POLICY

During the greater portion of the post-World War II period Spain had little foreign exchange. The strict quantitative limitation on imports during this period caused a shortage of raw materials and manufacturing equipment. Domestic industries were developed to meet this need, but their prices often were not competitive with producers in other countries.

The first step to correct these deficiencies was the stabilization program of 1959. This program devaluated the peseta and established one official exchange rate. It was responsible for an immediate increase in foreign exchange earnings. Import regulations were relaxed to a large extent, and it was possible to import more freely and on more advantageous terms. A new law on foreign investment attracted more capital and arrested internal inflation.

The second step was adoption of the new development plan on January 1, 1964. Through this program Spain's goal is greater economic parity with its neighbors and membership in the European Economic Community, its biggest market. To achieve these objectives the Government has adopted several measures. These include:

(1) Foreign trade: A National Institute of Export Trade (Instituto Nacional de Comercio Exterior) has been formed in which public and private export interests shall be represented for the development of export markets. Information and advisory services, including market surveys for Spanish products, are provided by the Institute.

(2) Customs tariff: The process of liberalization is to continue and preference will be given to less technically advanced manufacturers.

(3) Trade and price control: Any interference with the free market price mechanism shall require the prior approval of a Commission for Economic Affairs, formed by the Ministers of Commerce, Finance, Agriculture, and Industry. Regulations protecting free competition, along the lines of those prevailing in other OECD countries, shall be issued by the Ministry of Commerce.

Since the adoption of the stabilization plan the Spanish economy has improved steadily. However, with the growth of the economy, agricultural imports have increased substantially while agricultural exports have not increased at the same rate. This deficit, coupled with the lack of natural resources, has necessitated a shift away from the isolationist policies held by Spain since its Civil War. The objectives of the Spanish Government are now being adjusted toward a possible closer association with the countries of the Common Market.

Since joining the OECD (formerly the OEEC) on July 20, 1959, Spain has been progressively liberalizing its trading controls. The most recent liberalization list, March 1, 1963, removed restrictions on about 80 percent of agricultural imports from OECD countries, based on 1959 trade. In addition, all but 10 percent of bilateral trade agreements have been replaced by global quotas.

Spain's remaining bilateral trade agreements are primarily with countries in Western Europe. It also has trade arrangements (central bank clearing agreements, which amount to bilateral trade agreements) with a number of Eastern European countries. A large portion of the goods remaining under bilateral trade agreements are imported through state trading agencies. The principal agricultural items handled by state trading are tobacco (by a Government monopoly), textile raw materials of agricultural origin, and basic foodstuffs, particularly cereals. Many of the state-traded items are under domestic price supports, at or above world prices. The Government continues controlling these items to insure a sufficient and continuous supply and to avoid speculation.

Imports which have been liberalized do not require an import license. However, an import declaration must be submitted by the importer to the Ministry of Commerce. Where licenses are still required, each license application is considered individually in accordance with estimates by the Ministry of Commerce of the most urgent needs of the economy.

In June 1960, Spain changed from specific duties to primarily ad valorem duties. However, it is still considered a high tariff country. These high tariffs are a serious disadvantage as Spain

must import expensive machinery and tools to modernize its industry. The Spanish import tariff has provisions for supplementary duties which may be varied from time to time. Most imports are also subject to a fiscal tax designed to compensate for the various domestic taxes on similar goods produced in Spain.

Awarding direct contracts seems to be gradually replacing the call-for-bids basis of importing. However, most importing is still controlled by the Government or a semigovernmental organization. Food items are imported by the National Supply Commission, tobacco by the State Tobacco Monopoly, and cotton by the Commercial Service of the National Textile Industry.

Spain has also made progress in encouraging exports by removing some restrictions and controls on certain types of exports. However, all exports from Spain to all destinations are subject to export licenses and exchange control.

Licenses and exchange controls are administered by the same agencies that administer the import controls. In general, all foreign exchange proceeds from exports must be turned over to the Foreign Exchange Institute, through banks or exchange offices, at the official rate of 60 pesetas to the dollar.

Export prices for a few products are fixed by decree. In all other cases, approval of the export price is essential for the issuance of licenses. If the price agreed upon by the exporter and the foreign buyer is not satisfactory to the trade control authorities, the application may be rejected or approved at another price.

To pave the way for additional exports, exporters have been allowed to extend medium- or long-term credit to their customers since 1960 through facilities provided by the Government. Export credit insurance has also been available since the end of 1961.

COMMODITIES COMPETITIVE WITH U. S. AGRICULTURAL PRODUCTS

Spain will probably have great difficulty in reaching a highly industrialized stage, because it lacks essential natural resources. It is primarily agricultural and depends chiefly upon foreign

markets to sell its specialized agricultural products. These products must be sold at world prices, but many of them are hard to sell because of low quality and hence low price in the foreign retail market. Spain can be expected to increase production of vegetable oils, cotton, and feed grains for domestic consumption, and of citrus fruits and vegetable products for export.

Although Spanish agricultural production may expand, some U. S. agricultural imports probably will still be needed in the short run. A sharp increase in Spanish agricultural production is not likely because present land fragmentation prohibits efficient utilization, and lack of irrigation limits output per unit of land. In the long run, continued U. S. agricultural exports to Spain will depend on Spain's ability to earn foreign exchange, the level of domestic demand, more efficient and effective land use, and internal policies for trade and marketing that will facilitate the free entry of goods into Spain.

Olive oil

Production.--Spain is the world's leader in olive tree acreage, in the production of olives, and usually in the production of olive oil. A very important part of Spain's economy depends upon a normal harvest of olives with an adequate oil content. Olive oil accounts for most of Spain's supply of fats for domestic consumption and an important share of agricultural exports. The olives are crushed in about 10,000 mills (employing close to 90,000 people). National average productive capacity for a working day is 7,400 short tons of olive oil.

During the period 1950/51 to 1961/62 olive tree acreage increased 6 percent. If this trend continues the maximum amount of land that can be efficiently used for this crop may soon be reached. The development of a well-balanced agricultural program has been hampered somewhat by planting 5 1/2 million acres to olives, a highly speculative and irregular crop. Many farmers would prefer a more stable cash crop than olives.

The new economic development plan contains a well-balanced program for agricultural production for both the domestic and the export market. It emphasizes livestock management and feed grain production. Under this plan, the acquisition of large

areas of submarginal land by the Spanish Government may limit the availability of land for future expansion of olive tree acreage.

On the other hand, if olive tree acreage does expand and existing cultivation practices are improved, it is possible that Spain may be able to provide more of its own vegetable oil requirements. However, it is more likely that it will continue to rely on foreign sources for most of its supply of other vegetable oils. These oils are a substitute for olive oil for domestic consumption in deficit years; and also, because of their lower price, they free higher-priced Spanish olive oil for export.

Andalusia is the chief olive oil producing region. Here the olive trees rarely grow in association with other crops. Elsewhere, especially in the north (in Catalonia, Aragon, and Old Castile), olive trees are grown along with grapevines, almonds, carobs, walnuts, grains, or vegetables. Of the 5.7 million acres in olive trees in 1962, about 7 percent, or almost 405,000 acres, were in young trees not yet bearing fruit. Of the 5.3 million acres of fruit-bearing trees, 5,139,680 acres were devoted to olive trees for oil, and 180,383 acres to table olive trees.

Official Spanish statistics on olive oil production are not always reliable chiefly because of incomplete reporting. However, from these statistics it is apparent that many olives and much olive oil do not reach the usual marketing channels. In 1960/61, for example, olive production was officially reported at 2.7 million short tons grown on a reported 5.3 million acres of fruit-bearing trees. The estimated yield per acre based on these figures is almost one-half of a ton (984 pounds). This amount is much lower than yields per acre from other similar olive-growing countries. For example, Italy, with the same soil and climatic conditions as Spain, had an estimated yield per acre in 1960/61 of 1,886 pounds. Therefore it is possible that as much as one-third of the Spanish crop was not reported. The disappearance may have resulted from direct consumption by the producers and their hired help, or by others who obtained olives from the producer or mill operator without reporting the transaction to the government. It is probable that olives or olive oil are disappearing into channels other than the regular marketing courses because of the tax levied on all newly pressed olive oil. Many producers are reported to have refused to pay this tax in full or in part.

Imports.--The soybean oil which Spain imports from the United States has made a significant contribution to the Spanish diet, usually representing more than 10 percent of the daily fat supply. The following data reveal the importance of United States soybean oil in the Spanish diet.

Year beginning July	U.S. soybean oil exports to Spain	Calories per capita from U.S. soybean oil	Total calor- ies per capita from all fats
	Short tons	Calories per day	Calories per day
1955/56	115,190	33	386
1956/57	216,112	61	402
1957/58	155,773	44	411
1958/59	201,420	56	420
1959/60	180,147	50	474
1960/61	195,779	54	465
1961/62	100,599	27	485
1962/63	<u>1/</u> 115,710	33	<u>1/</u> 486

1/ Estimated.

Another indication of the importance of U. S. soybean oil to Spain is its use by the Spanish Government as a "control commodity" in regulating the Spanish edible oil market. For the marketing year which began November 1, 1962, Spain fixed the retail price of soybean oil (in bulk) at 20 pesetas a liter (16.8 U. S. cents a pound) and olive oil blended with soybean oil at 24 pesetas a liter (19.9 U. S. cents a pound). In comparison, the price received by Spanish producers in January 1963 for first-grade bulk olive oil was about 34 pesetas a liter (25.8 U. S. cents a pound). This price difference determines the trading movement of these two readily substitutable oils. Since imports of soybean oil are regulated, and soybean oil is usually the lowest priced edible oil available for consumption, the price level of other imported vegetable oils can be controlled to a large extent.

Exports.--There was a large increase in olive oil exports between 1946-50 and 1961 due primarily to rising production, resulting from greater olive tree acreage and improved cultivation

practices (table 5). Exports were valued at \$44.4 million in 1962, about 11.2 percent of total agricultural exports for the year. This was a decrease from the preceding year because of regulations imposed by the Government after a small olive oil crop.

Exports of Spanish olive oil to the United States are of major importance to Spain. In some years, primarily before 1957, exports to the United States have amounted to as much as 50 percent of total Spanish olive oil exports and about half of total U. S. olive oil imports.

The United States was the largest importer of Spanish olive oil until 1959 when it was replaced by Italy. Since then Italy has increased its imports of Spanish olive oil because of poor domestic crops and poor olive oil harvests in Tunisia, normally Italy's principal supplier. It is expected that Italy will continue to be a heavy importer of Spanish olive oil because of an increasing domestic demand for olive oil.

Even though per capita annual consumption of olive oil is very small (about 4 ounces) the United States is still the principal consumer of olive oil in the world, with the exception of the olive producing countries of the Mediterranean. Olive oil consumption has probably reached a ceiling in the United States; it no longer shows any significant response to rising income.

Because olive oil production is subject to so-called "off" years and "on" years which occur roughly every second year, stable exports can be attained only by having adequate storage space readily available. A subdivision of the National Olive Oil Syndicate, Syndicate Service for the Regulating of Stores, is responsible for furthering the olive oil storage program. ^{4/} At the present time only 77,000 tons of olive oil can be reliably stored in modern warehouses.

Competition.--The most important fat consumed in Spain has always been olive oil, but in recent years there has been a

^{4/} The National Olive Oil Syndicate (Sindicato Nacional del Olivo) is a quasi-governmental organization which controls olive and olive oil production, processing and marketing. The Syndicate also advises the Ministry of Agriculture on requisites for the growth and protection of the olive and olive oil industry.

Table 5.--Spain: Total exports of olive oil by destination, and percentage of U. S. olive oil imports, average 1946-50 and 1951-55, annual 1956 to 1962

Item	Average 1946-50	Average 1951-55	1956	1957	1958	1959	1960	1961	1962
----- <u>Short tons</u> -----									
Total olive oil exports.....	15,926	29,946	45,031	25,560	20,795	41,004	169,175	143,307	84,768
----- <u>Percent</u> -----									
Percentage distribution									
Common Mar- ket coun- tries.....	15.9	3.6	3.2	1.0	3.7	24.3	65.2	53.3	58.9
EFTA coun- tries.....	7.5	11.4	8.7	8.5	10.0	25.8	3.7	0.9	0.6
United States...	50.0	34.4	57.8	12.2	23.3	17.0	20.1	13.1	16.2
Spain's share of U.S. olive oil imports.....	48.0	21.1	58.2	6.4	9.1	12.9	66.5	67.6	49.6

sharp increase in imports of other fats and oils. Spain has developed into the most important dollar market for soybean oil, preferring to export the more expensive olive oil and importing cheaper soybean and other seed oils for domestic consumption. This change has been caused mainly by two factors: (1) The demand for fats and oils has increased as a result of higher per capita incomes; and (2) the production of olive oil has risen relatively slowly, mainly because it takes many years for new plantings to become fully productive. In years of short supply, however, exports of olive oil are strictly limited to assure minimum supplies for domestic consumption and to hold down the domestic price of olive oil.

At one time, the Spanish Government freely allowed the mixing of soybean oil with olive oil at a ratio of 90 percent olive oil and 10 percent soybean oil. ^{5/} However, since November 1960, mixing of the two oils is prohibited except by Government decree. The ban on mixing was put into effect so that large stocks of olive oil would not accumulate and also to allow for a more orderly marketing of olive oil supplies, especially in some of the different geographical areas that have intermittent shortages.

On November 12, 1963, a new olive oil regulation was established. It was amended on January 10, 1964 to allow more freedom of trade. The amended regulation also established new support prices for olive oil at 24.20 to 27 pesetas per kilogram (18 to 21 U. S. cents per pound), depending upon acidity. At these support prices the National Supply Commission will buy any amount offered for sale by producers. In addition, the regulation provides for the sale to packers, upon request, of blended oil in proportions of 1 kilogram of refined sulphur olive oil, 1/2 kilogram of refined cottonseed oil, and 1.5 kilograms of soybean or sunflower oil, at the following prices:

	Pesetas per kilogram	U. S. cents per pound
Refined sulphur olive oil....	20.75	15.7
Cottonseed oil	20.00	15.2
Soybean oil	16.30	12.3
Sunflower oil.....	16.30	12.3

^{5/} Olive oil and soybean oil can be used as foods or aids in cooking (frying, roasting, baking, etc.) and as ingredients in other food products.

Spain's share of the Common Market countries' olive oil market is still undetermined. Italy, a member of the EEC, is a large olive oil producer and is increasing its olive tree acreage. Greece is now an associate member of the EEC, while Israel and Portugal have made overtures to be considered for some type of association. Spain applied to the EEC for membership in February 1962. However, the final outcome as to who will get what in the EEC trading area and what trading restrictions will be imposed on whom depend on political as well as economic considerations.

Some evaluation of the competition Spain will meet in future olive oil production and marketing can be gained by noting Spain's important position in world olive oil production. Spain accounts annually for between 30 and 40 percent of total world production (table 6). Olive oil production, however, is subject to a cycle of one good harvest year followed, usually, by a year of reduced harvest. Many theories have been offered to explain these variations but it is generally accepted that the method of harvesting harms the fruit-bearing ability of trees for the following year. In an attempt to smooth out the large fluctuations in the cycles, Spain has been applying more fertilizer, spraying to combat insects and diseases, and extending irrigation facilities. However, several European countries, notably Greece and Italy, show a decided increase in olive oil production. Turkey, another olive oil producing country with an increasing production trend, hopes for an association with the EEC.

Table Olives

Production.--Spain leads the world in table olive production in spite of cultivation methods which differ little from practices developed centuries ago. Olives to be used for oil are beaten off the trees with a stick and then recovered from the ground, but table olives are picked by hand into baskets and carefully transported to the processing plant.

Most of Spain's table olive production and almost all of the export varieties are grown in the province of Seville. The Spanish Government, recognizing the importance of the North American and United Kingdom markets, has designated the port of Seville

Table 6.--Estimated production of olive oil in the Mediterranean Basin countries, average 1954/55-1957/58, annual 1956/57 to 1963/64 1/

Country	4-year		Annual								
	average		1954/55-	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64
	1954/55-	1957/58	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	
	1,000 short tons										
France.....	6	3	5	2	2	2	1	2	2	2	
Greece.....	144	158	180	102	176	87	251	62	225		
Italy.....	274	191	389	288	321	419	434	331	440		
Portugal.....	86	103	111	68	101	104	125	68	100		
Spain.....	358	430	375	380	496	550	375	360	580		
Yugoslavia.....	4	4	5	4	1	3	4	3	8		
Total.....	872	889	1,065	844	1,097	1,165	1,190	826	1,355		
Israel.....	2	4	1	5	1	1	2	3/	1		
Syria.....	8	8	14	14	6	11	19	14	16		
Lebanon.....	9	15	7	12	6	8	10	7	10		
Turkey.....	69	99	48	100	73	87	105	55	80		
Total.....	88	126	70	131	86	107	136	76	107		
Algeria.....	23	26	23	20	22	21	15	21	16		
Morocco <u>4/</u>	23	38	10	39	24	27	21	27	20		
Tunisia.....	60	99	55	145	50	138	37	50	100		
Libya.....	7	9	14	3	7	3	17	6	12		
Total.....	113	172	102	207	103	189	90	102	148		
Grand total.....	1,073	1,187	1,237	1,182	1,286	1,461	1,416	1,004	1,600		

1/ Total oil pressed in marketing season beginning November 1 of year shown; excludes oil extracted from residue. 2/ Preliminary. 3/ Less than 500 tons. 4/ Figures refer only to territory formerly known as French Morocco.

as the only Spanish export point for table olives. ^{6/} Having only one export point allows for much closer inspection and consequently a more intensive quality control. Because of this close supervision, substandard olives seldom reach the foreign markets.

Packed ripe olives are prepared from properly matured olives after being treated to remove their typical bitter taste. The olives are picked when full-grown and straw-colored and after grading and sorting are placed in a 1.5 to 2.0 percent soda-lye solution. After several months (until it is determined that the soda-lye solution has penetrated about two-thirds to three-quarters of the way to the pit) the olives are washed with water and placed in a salt solution in rooms where temperature and humidity are controlled to allow rapid fermentation. Fermentation is usually completed in about 1 month in warm weather. The olives are then placed in a weak salt solution until final grading and shipping. The best fermented green olives are exported.

Average production of table olives in 1946-50 and 1951-55 amounted to just over 64,000 short tons for each period, but increased to 90,551 short tons by 1959. However, since 1959 Spain's production of table olives has declined, falling to 57,900 short tons in 1961; it is estimated to have decreased another 30 percent in 1962 to 41,000 short tons. This decline can be attributed largely to inclement weather, although in some years severe losses were caused by olive fly infestation. There was considerable controversy among the Spanish olive trade as to the reasons for the decline in table olive production in 1962. Some believe that the large loss of olives from the trees was due to the exceedingly dry and hot weather during the summer of 1962, while others maintain that the heavy rains that fell during the winter of 1961/62 caused many new roots to rot, thereby reducing the amount of nutrients that the trees could assimilate. It was also reported that the 1962 crop was harvested before the snow and freezes that occurred in December 1962 and, therefore, suffered little damage from these storms.

^{6/} The only type of table olives regularly exported from Spain through ports other than Seville is olives stuffed with anchovies. The ports of Vigo, Barcelona, and Valencia are the main shipping points for these table olives stuffed with anchovies.

In contrast, the increase from 1946 to 1959 in table olive production was due almost entirely to the much higher prices received for table olives than for olives used for oil. For example, the producer price for the Manzanilla type table olives during November-December 1962 averaged about 11.4 U. S. cents a pound. This was much higher than the average of approximately 2.3 U. S. cents a pound paid to producers for olives used for oil.

In addition, the Spanish Government imposes minimum prices which must be received for export olives before an export license will be issued. On March 1, 1963, the following minimum prices were established for which export permits will be issued:

<u>Type of olive</u>	<u>Dollars per short ton</u>
Whole Queens	726
Second Class Queens	680
Stuffed Queens	943
Stuffed Manzanillas.....	662

Other types and varieties of olives are not subject to price or trade controls.

Processors report that the labor cost of preparing stuffed olives has increased since 1961 by about \$60 per short ton. Wages for women were made equal to those of men in December 1961, and the minimum wage was increased from 60 cents to \$1.00 per day in January 1963. Since the bulk of the work in the table olive industry is done by women, these two measures provided the major part of increased costs.

An additional factor affecting the cost of stuffed olives was the increase in the price of pimentos. Pimento prices increased from around 11.3 U. S. cents per pound in 1962 to an all-time high of 34.0 cents a year later.

Nearly all of the imported olives used in the United States come from Spain and are generally known as "Queen" olives. A smaller olive (Manzanilla) than the "Queen" is used for stuffing. The most popular stuffed olive is filled with pimento, although anchovies, capers, and cheese are also used.

Spain's table olive exports during the 1961/62 marketing season (December 1 to November 30) totaled 48,600 short tons,

a considerable decline from the 62,328 short tons shipped during the 1960/61 marketing season, but still above the 1946-50 calendar year average of 32,966 short tons and the 1951-55 average of 31,856 short tons.

Inadequate control of the olive fly, Mosca del Oliva, causes Spain to lose large amounts of its olive crop in some seasons, as, for example, in 1960 and 1961. However, in spite of an intensified research program aimed at controlling the olive fly, control methods have not yet been generally accepted by the farmers. This is mainly because farmers do not have the money to invest in expensive insecticides, sprays, and equipment. They are also reluctant to change work methods.

The Spanish Government's policies and programs are aimed at maintaining and encouraging maximum production and utilization of the best green olives for foreign trade. Exportation of this type of table olive provides Spain with an important source of dollar exchange. Because of these policies no restrictions are placed on the amount of new olive plantings. Farmers are required, however, to plant on the contour to forestall soil erosion and water loss and to use desirable olive tree varieties in the approved districts.

Fresh Fruit and Nuts

Owing to the wide range in climatic conditions many of the important fruits of the world grow well in Spain, including such popular ones as oranges, tangerines, grapes, apples, apricots, and peaches (table 7). Fruit production is of major importance and could increase substantially with continued progress of new irrigation projects. Many large irrigation projects are already in partial operation.

Among the major reasons for the increased expansion of fruit production is the growing domestic demand owing to population growth, increased per capita income, and improved standards of living. Advertising the nutritional value of fruit, improving quality, and creating a more efficient system of internal distribution have also stimulated demand.

Spain has a large export trade in fruit, especially citrus fruit, and is capable of further expansion with some improvements in quality, handling, packaging, and transportation.

Table 7.--Spain: Area devoted to fruits and nuts and production of specified commodities, average 1946-50 and 1951-55, annual 1956 to 1963 ^{1/}

Commodity	Unit	Average: :1946-50:	Average: :1951-55:	1956	1957	1958	1959	1960	1961	1962	1963
Area devoted to:											
Oranges.....	1,000 acres:	192	220	205	218	237	249	260	274	2/	2/
Grapes, dessert.:	do	221	248	252	252	267	242	245	243	2/	2/
Almonds.....	do	380	388	423	425	425	440	497	503	2/	2/
Filberts.....	do	57	59	60	60	60	60	59	58	2/	2/
Production of:											
Oranges.....	1,000 70	24,015	37,094	15,378	40,068	37,044	49,251	48,164	52,088	51,530	46,322
	lb. boxes										
Grapes, table....	1,000 short:	212	256	270	235	280	245	251	276	273	280
	tons										
Almonds.....	do ^{4/}	23	23	16	18	32	25	32	35	20	28
Filberts.....	do ^{5/}	26	21	18	20	24	15	17	19	14	22

^{1/} Commercial production only. Data in year of bloom.

^{2/} Preliminary.

^{3/} Not available.

^{4/} Shelled basis (25 percent).

^{5/} Unshelled basis.

The United States, like Spain, grows and exports large quantities of many kinds of fruit. Many of the areas that buy Spanish fruit also purchase from the United States. In Western Europe, U. S. exports must meet the rather low Spanish price for fruit and the apparent preference of the population for the Spanish product.

Oranges

Production.--Oranges (including a nominal quantity of tangerines) occupy a very important place in the Spanish agricultural economy as they are the leading fruit export and the most important Spanish export item. Spain's orange industry is planned entirely for the export market, thus most oranges must meet specified export qualifications. Spain is the major supplier to Western Europe's large orange market.

Although oranges are grown all along the southern coast of Spain, commercial production is limited primarily to an area 200 miles long from Castellon southward to Murcia. The city of Valencia, located in the Province of Valencia, is to the orange industry of Spain what Los Angeles is to the orange industry of California. The Province accounts for about 50 percent of all orange trees in Spain.

Production of oranges during 1946-50 averaged 24.0 million boxes. By 1961 the crop had more than doubled, reaching 52.1 million boxes. However, the 1962/63 Spanish citrus crop was severely damaged during December 24-26, 1962, by the worst freeze since February 1956. The low temperatures resulted in heavy losses of fruit but did very little damage to the trees.

Exports.--The Spanish Government completely controls the export of citrus fruit. As a part of Spain's Stabilization Program and the attempt to liberalize trade starting in 1959, exporters are issued global export licenses or individual country licenses if more convenient. In addition, a specific export permit must be issued for each export shipment, at which time the proposed export price is also approved. The temporary export duty imposed in July 1959 to combat speculation and price rises was removed July 22, 1963 for almost all agricultural exports except hides and skins.

On July 31, 1962, a citrus export regulation was established for different grades of Spanish oranges. This regulation states the varieties, maturities, and test specifications for Spanish export oranges. It also designates sizes of fruit for containers when shipping, maximum depth of fruit when transported in bulk, methods of sale, and the maximum time fruit may be in transit from Spain to the market.

All export sales must be made on a firm basis except for shipments on consignment to countries where public auctions are held. All foreign exchange earned from the export of citrus fruit must be deposited with the Spanish monetary authorities.

In addition, the Spanish Export Control Service (SOIVRE) maintains inspectors in all domestic points of exit and in London, Liverpool, Hamburg, Bremen, Rotterdam, Goteborg, Oslo, and Copenhagen to check on the quality of Spanish fruit on arrival. These inspectors handle any complaints on quality and keep the Spanish office of the Export Control Service informed when difficulties arise in the receiving markets.

During 1946-50, the United Kingdom was the largest importer, taking 3.2 million boxes, followed by France, 1.9 million boxes, Belgium-Luxembourg, 1.1 million boxes, and Sweden, 889,000 boxes (table 8). During the same period, five of the countries which make up the Common Market (excluding Italy) imported 4.2 million boxes while the other countries in Western Europe took almost all of the remaining 5.0 million boxes.

In the early 1950's, however, West Germany became the most important customer for Spanish oranges, followed by France, which took fewer Spanish oranges because of trade agreements with Morocco and Tunisia. The United Kingdom, the Netherlands, and Belgium-Luxembourg, in that order, were the other major importers of Spanish oranges during 1962.

The Common Market countries thus increased their percentage share of total Spanish orange exports from 45 percent of total in 1946-50 to 74 percent in 1962. The share of total orange exports to the other Western European countries dropped by about 30 percentage points in the same time period. Orange exports to the Eastern European bloc were started in 1958 but have fluctuated erratically.

Table 8.--Spain: Exports of oranges by country of destination, average 1946-50 and 1951-55, annual 1956 to 1962 1/

Area and country	Average 1946-50	Average 1951-55	1956	1957	1958	1959	1960	1961	1962
-----1,000 Boxes-----									
Common Market Area									
Belgium-Luxembourg....	1,071	2,288	908	967	1,767	1,863	2,498	2,193	2,822
France.....	1,917	5,983	1,975	2,518	3,924	4,344	5,122	3,946	4,625
West Germany.....	349	7,759	3,917	5,732	7,439	9,289	11,880	10,737	13,476
Netherlands.....	872	1,786	1,326	833	2,490	2,508	2,825	2,847	3,556
Total.....	4,209	17,816	8,126	10,050	15,620	18,004	22,325	19,723	24,479
Other West European Countries									
Denmark.....	215	484	136	196	273	335	505	406	528
Norway.....	185	780	259	332	462	538	752	753	854
Sweden.....	889	1,266	421	463	808	846	1,144	1,335	1,512
United Kingdom.....	3,181	5,045	2,246	2,432	2,456	2,133	2,696	2,870	3,583
Others.....	507	1,702	709	851	2,782	1,678	1,493	1,036	1,367
Total.....	4,977	9,277	3,771	4,274	6,781	5,530	6,590	6,400	7,844
Eastern Europe									
East Germany.....	0	0	0	0	0	0	28	228	204
Yugoslavia.....	0	0	0	0	66	58	84	109	86
Others.....	0	0	0	0	545	1,098	592	380	383
Total.....	0	0	0	0	611	1,156	704	717	673
Others.....	241	127	33	119	39	15	21	57	217
Total.....	9,427	27,220	11,930	14,443	23,051	24,705	29,640	26,897	33,213

1/ Calendar year.

The EEC countries account for about 15 percent of the world citrus fruit consumption. France, West Germany, and the Benelux countries rely entirely on imports for their consumption requirements. Spain is the main supplier to the EEC for winter oranges (by far the most important orange), followed by Morocco and Tunisia.

The economic recovery of West European countries and changes in the export policy of Spain have affected Spain's orange market. Exports to the Common Market countries from Spain showed a slight decrease in 1961, recovering though in 1962. This appears to be a slight departure from Spain's trend toward increasing exports; indicating perhaps rising competition from other Mediterranean countries.

Although Spanish orange production is increasing, production in other countries is also considerably higher. Spain's principal competitors in the growing West European market have increased their production of oranges tremendously since 1946-50 (table 9). They have more than doubled production since 1946-50, with the exception of Algeria and South Africa. This increased orange production by Spain's competitors could lessen the demand for Spanish exports. Thus Spain's exportable oranges would drop in prices, even though consumption by its traditional markets increases. However, a decline in prices could very well result in increasing consumption in Eastern European markets, and in the markets for juices and concentrates.

Competition.--The possibility of Spain's eventual acceptance into the EEC may act as a deterrent to growers in Italy and Greece from increasing their citrus producing areas. However, if Spain is not accepted, the EEC tariff preference will definitely be a strong incentive for orange-producing countries in the EEC to increase their citrus acreage and to modernize their citrus processing facilities. 7/

7/ Under the tariff provisions initiated by the Treaty of Rome, tariff preferences will be extended to EEC producers. For oranges, the proposed external tariff is 20 percent ad valorem during the period October 1 to March 14, and 15 percent during the rest of the year.

Table 9.--Spain: Production of oranges by principal suppliers to West Europe, other than the United States, average 1946-50 and 1951-55, annual 1956 to 1963 1/

Year beginning November 1	Spain	Italy	Israel	Morocco	Algeria	Brazil <u>2/</u>	South Africa
-----1,000 Boxes-----							
Average,							
1946-50	24,015	14,367	8,081	3,833	6,156	12,500	6,118
1951-55	37,094	20,781	9,210	6,190	9,490	13,460	7,830
1956.....	15,378	21,123	10,829	8,230	11,702	16,000	10,098
1957.....	40,060	23,023	11,245	11,001	10,619	20,000	9,162
1958.....	37,044	26,541	15,646	12,295	10,709	23,000	9,058
1959.....	49,251	26,181	15,525	12,548	11,826	24,000	13,094
1960.....	48,164	27,154	12,573	14,094	6,677	25,000	11,424
1961.....	52,088	29,186	12,108	14,233	<u>2/</u> 8,000	36,200	12,700
1962.....	51,530	26,877	17,300	<u>3/</u> 15,000	<u>2/</u> 10,000	33,600	<u>2/</u> 11,000
1963 <u>3/</u>	46,322	31,620	19,054	19,200	<u>2/</u> 11,000	55,000	8,700

1/ One box equals 70 pounds.

2/ Estimated.

3/ Preliminary.

In addition, suppliers outside the EEC, and this could include Spain, will see their earnings from orange exports reduced because of this external tariff. They may be expected to try to pass on a portion of this tariff to the importing countries. This may cause prices to rise in some of the importing EEC countries. While these price increases may not lead to a serious reduction in consumption, they might slow down the rate of consumption and subsequent acreage expansion.

U. S. shipments of oranges to West European markets have never been very significant, supplying about 5 percent of the annual demand. Even this small share has been shrinking in recent years. Shipments in 1956 amounted to 3.7 million boxes, declining to 1.4 million by 1962. In recent years, the Netherlands has taken about 50 percent of the total U. S. orange shipments to Europe.

Spanish oranges generally reach the market at a lower quality than U. S. oranges because of less care during growth; also, handling and packaging are not as careful as in the United States. In spite of this, the Spanish orange sells well while the U. S. product of comparable size finds keen competition in most European markets. 8/

A special advantage exists in West Germany for Spanish oranges because they are untreated. German law regulates food and labeling and in some cases prohibits the use of color on oranges. Fruit which has been treated by a chemical is required to be marked at retail level "treated with chemicals, peel unfit for use."

Starting with the 1959/60 season, all packed fruit shipped by rail to Germany must have the words "nature pure" on each package showing that the fruit has not been treated with chemicals. This regulation assures Spain a maximum advantage for the sale of its untreated fruit for table use in Germany.

8/ In spite of the fact that other suppliers of oranges to West Europe are doubling production, a real market for the U. S. orange does exist; therefore, only the Spanish and U. S. products are compared here.

Almonds and Filberts

Production.--The almond and filbert industry in Spain follows the same general pattern of production, processing, and marketing as in the other nut-producing countries of the Mediterranean. Almond and filbert (or hazelnut) trees are hardy, living and producing under difficult conditions. Spain's most fertile areas, based on soil type, topography, and climate, are usually planted to apricots, pears, plums, and citrus fruits. Consequently, almonds and filberts, along with olive trees and grapes, are grown on poorer soils and in less favorable locations. Nevertheless, Spain is usually the world's second largest producer and exporter of almonds. In some years, Spain even replaces Italy as the world's leader. The United States ranks third in production, but not until recently have U. S. almonds become important in world trade. Iran, Portugal, and Morocco are other important commercial almond-producing countries.

Though cultivation of almonds is found in practically every Spanish province, the highest producing region is in the fruit belt which runs from Barcelona south along the coast; the most important centers of production are in the provinces of Alicante, Castellon, and Murcia, which produce about 30 percent of the total Spanish almond output.

Contrary to the production pattern of almonds, most commercial filbert tree cultivation is confined to just three Spanish provinces: Tarragona, Barcelona, and Oviedo. Tarragona Province alone accounts for about 75 percent of the total Spanish filbert production while the three provinces together produce over 90 percent.

Production of filberts is not expected to increase and probably will decline to a point where it will be limited to domestic requirements. The main reason for this expected decline is that filberts are more expensive to produce than almonds because the trees require relatively more attention.

Commercial almond production in Spain increased from 16,000 short tons in 1956--shelled basis--to 28,000 short tons in 1963 (table 7). Most of this increase resulted from new almond trees reaching maturity. In addition, the weather was favorable

for almond production during most of this period; except in 1962, when only 20,000 short tons--shelled basis--were harvested.

Almond trees are seldom fertilized or sprayed with insecticides except by some of the large and progressive commercial growers. These two desirable farming practices are not generally followed because (1) the additional returns from the sale of these nuts might not pay for the fertilizers and insecticides used, and (2) the trees usually are planted on the more unfavorable and distant area of the farm, so the time spent servicing these scattered trees might be more economically spent doing other farm work. The fluctuations that appear in production from year to year are usually related to the weather.

The harvesting of almonds and filberts is delayed until the hulls have begun to dry and are partially curled open so they can be quickly and easily freed. The most common method of harvesting is to spread some old sheets or blankets under each tree, then shake or hit the branches with a stick to bring down the nuts. They are usually then dried and stored on the farm where they are produced.

In Spain, the average almond kernel yield is estimated between 25-30 percent, compared to about 50 percent for California almonds. However, most of Spain's almonds are of the hard or semihard shell varieties while California's are the larger, thinner skinned, soft-shell variety.

One of the problems faced by the local shellers, who buy the greatest amount of nuts, is the delay in receiving nuts from the growers. Growers tend to hold the nuts as long as possible hoping to make a maximum profit.

Exports.--Almond exports are important to the Spanish agricultural trade. Shelled almonds amounted to 90 percent or more of all almonds exported since 1955 and usually represented between 5 and 10 percent, by value, of total agricultural exports for the same time period. The value of shelled almond exports has increased from \$8.6 million in 1946-50 to \$20.5 million in 1961, after reaching a record in 1960 of \$27.5 million.

Table 10 shows great fluctuations from year to year in the destination of almond exports. In most years the United Kingdom has been the chief recipient.

Unshelled almond exports usually amount to less than 10 percent of total almond exports. However, exports of unshelled almonds increased to 2,299 short tons in 1962 from 2,094 short tons in 1946-50.

Official figures on filbert exports indicate wide fluctuations in annual trade (table 11). In spite of the small increase in production in the mid-1950's, there was no significant increase in exports. The decline in exports in 1961 and 1962 was the result of smaller Spanish production, larger Italian production and export, and an increase in domestic demand because filbert prices were well below almond prices.

Competition.--Industrial use of almonds in Spain consists mainly of the manufacture of "turrón," a candy similar to a nougat. This use and other domestic consumption account for about 5,000 to 8,000 short tons of almonds annually.

In the large U. K. market, Spanish almonds are preferred over those from the United States mainly because of their lower price. Another marketing disadvantage for U. S. almonds, worldwide as well as in the U. K. market, is the lack of one or more consistent suppliers of exportable almonds. However, in spite of these disadvantages, U. S. almonds do find markets in Britain. Their uniformity of size and clean appearance compensate for their higher price and erratic supplies.

The United States is not considered a major outlet for Spanish exports of almonds and filberts (tables 10 and 11). Since 1956, shelled almonds have been the only nuts regularly shipped to the United States from Spain and even these exports have dropped steadily, due primarily to expanding U. S. production.

In general, U. S. almond producers export to Europe only when an unusual supply-price situation in the United States justifies the shipping costs to Europe. When an American producer enters the European market, his net returns are considerably less than when selling at home. This tends to limit the volume of U. S. almond exports to the European markets.

Standards for shelled and unshelled Spanish almonds were established by a resolution of the Office of the Director General

Table 10.--Spain: Almond exports by country of destination, average 1946-50 and 1951-55, annual 1956 to 1962

Country	Average 1946-50	Average 1951-55	1956	1957	1958	1959	1960	1961	1962
----- Short tons -----									
Shelled									
France.....	406	2,831	1,084	4,059	7,833	3,361	6,850	5,195	7,836
West Germany.....	2	1,150	134	126	131	2,692	5,857	3,094	3,555
Sweden.....	1,227	905	30	159	365	478	2,021	1,013	2,351
Switzerland.....	1,649	1,213	529	1,525	6,656	1,471	1,452	885	1,811
United Kingdom.....	4,297	3,519	1,329	865	1,320	4,698	9,733	7,138	7,700
Other West Europe....	1,962	2,768	773	738	862	1,119	1,919	1,513	1,984
East Europe <u>1</u> /.....	0	0	0	108	496	3,102	1,249	571	509
Canada.....	173	238	337	1,029	282	228	699	996	993
United States <u>2</u> /.....	1,016	1,245	217	1,076	2,245	2,033	735	650	496
Mexico.....	127	255	58	72	193	125	164	91	71
Cuba.....	60	82	18	110	96	112	46	0	0
Other Latin America..	377	123	132	<u>3</u> /5,661	88	<u>3</u> /1,019	287	289	352

Lebanon.....	0	0	0	8	1	42	112	168	132
Other Asia.....	88	343	23	24	0	37	65	165	<u>4/1,019</u>
Algeria.....	0	42	14	12	9	93	139	79	22
Egypt.....	47	126	0	145	289	17	74	97	110
Union of South Africa..	0	2	0	23	8	25	84	78	97
Other Africa.....	35	65	44	1	18	0	8	57	44
Oceania.....	40	45	0	14	0	13	18	77	123
Total.....	11,506	14,952	4,722	15,755	20,892	20,665	31,512	22,156	29,205
						Unshelled			
United States.....	82	69	0	0	165	72	91	54	26
France.....	1	128	122	259	404	507	670	692	619
West Germany.....	0	1	0	11	8	126	290	285	244
United Kingdom.....	756	110	0	15	76	247	471	259	188
Brazil.....	198	178	6	252	169	190	493	60	174
Egypt.....	327	226	0	383	108	411	325	0	634
Others.....	730	303	33	75	441	63	713	1,008	414
Total.....	2,094	1,015	161	995	1,371	1,616	3,053	2,358	2,299

1/ Includes USSR.

2/ Includes Guam and Puerto Rico.

3/ Exports to Chile were 5,389 tons in 1957, 948 tons in 1959, and nil all other years.

4/ Exports to Hong Kong were 766 tons in 1962 and nil all other years.

Table 11.--Spain: Filbert exports by country of destination, average 1946-50 and 1951-55, annual 1956 to 1962

Country	Average 1946-50	Average 1951-55	1956	1957	1958	1959	1960	1961	1962
----- Short tons -----									
Shelled									
France.....	23	682	861	1,247	843	199	797	1,109	709
West Germany.....	0	327	110	54	0	786	2,889	923	342
Switzerland.....	1,525	1,872	1,002	2,449	331	735	908	619	780
United Kingdom.....	477	216	21	0	0	57	534	253	186
United States.....	13	48	22	0	0	0	468	223	496
Others.....	570	819	930	1,191	316	1,180	1,451	1,132	1,538
Total.....	2,608	3,964	2,946	4,941	1,490	2,957	7,047	4,259	3,561
Unshelled									
Saudi Arabia.....	3	1	11	5	216	0	130	185	0
Poland.....	0	0	0	216	540	0	0	63	0
Brazil.....	399	22	26	143	187	182	353	43	153
Others.....	897	629	614	1,418	93	625	605	100	1,082
Total.....	1,299	652	651	1,782	1,036	807	1,088	391	1,235

of Foreign Trade on March 23, 1961. Standards for shelled and unshelled filberts were established on April 27, 1961, by the same office. These standards are compulsory in foreign trade and compliance with them is enforced by the Inspection Service of the Ministry of Commerce (SOIVRE).

Almond production and trade should continue to prosper and grow as there is an increasing world demand for this nut. Even though Italy, Turkey, and Iran are increasing production, world demand is usually greater than world supply.

Cotton

Cotton production in Spain, with a few minor setbacks, has shown an upward trend since 1958 (figure 1). In the 1962/63 season, 505,000 bales (each 480 pounds net weight) were produced, up 15,000 bales from the previous year's record of 490,000 bales. This continued rise resulted from increased irrigation of acreage

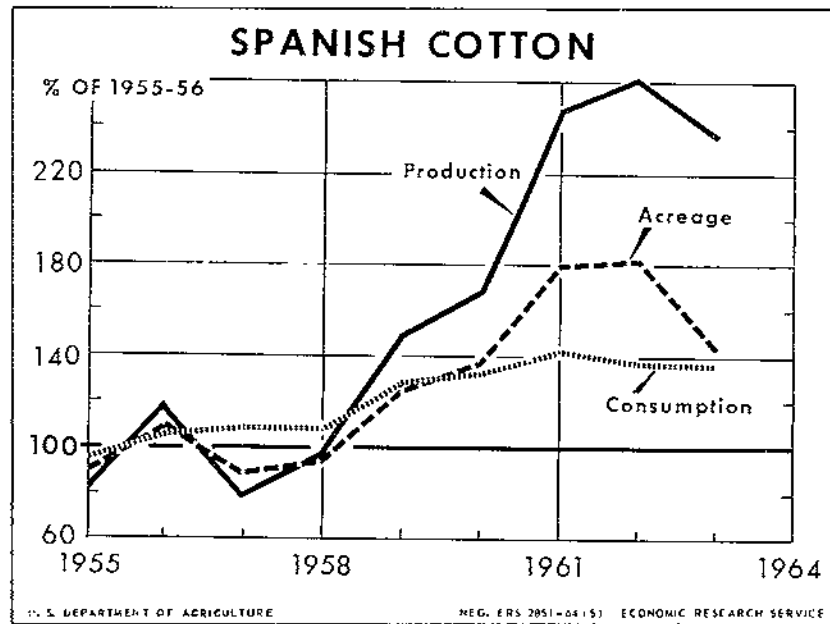


Figure 1

devoted to cotton. Yields have also trended upwards through more effective insect and disease control, and by the use of improved seed.

Future imports will be limited to certain special grades and staple lengths because Spain is now emerging as a cotton exporter.

Consumption by textile mills will continue high but will probably not increase in the near future unless there are sizable capital investments for new equipment and machinery.

Production.--Cotton is grown extensively all over the southern half of Spain, but the most intensive areas of cultivation are concentrated in the Cordoba-Seville area, and around Badajoz.

Two types of cotton are permitted to be grown, the American-upland type and the Egyptian. Under the present system of support prices in the form of a purchase program, cotton is the most profitable crop that can be grown on a large scale on irrigated land, and it also competes favorably with wheat on dry land. The wheat-fallow rotation is being modified by some producers who now plant wheat one year and cotton the following year.

Spain's agricultural policy regarding cotton has varied somewhat over the past few years. In general, the Government has tried to promote cotton production by providing price supports and technical and economic assistance to growers.

The main factors helping to encourage cotton expansion in Spain are the stability of the market with a guaranteed sales outlet and the nonperishable nature of cotton. This is important since transportation to market is unreliable in some parts of Spain. Still another factor influencing the production of cotton is that returns are greater from cotton than from most crops.

Government support prices have increased from 8.7 cents per pound in 1953 to 11.7 cents in 1959 for American-type, No. 2, irrigated, unginmed cotton (table 12). After 1958, a sizable increase in cotton acreage occurred due to the substantial increase in prices that year. Beginning with the 1963 crop, there were two support prices for American-type seed cotton (the type usually

Table 12.--Spain: Average yearly price paid producer per pound for seed cotton by type, No. 2 cotton, unginned, 1953 to 1962

Year	American type irrigated	American type dryland	Egyptian type
----- U. S. cents per pound -----			
1953....:	8.7	8.3	9.8
1954....:	8.7	8.3	9.8
1955....:	8.7	8.3	9.8
1956....:	8.7	8.3	9.8
1957....:	8.7	8.3	9.8
1958....:	11.0	10.9	13.5
1959....:	11.7	11.7	14.8
1960....:	11.7	11.7	14.8
1961....:	11.7	11.7	14.8
1962....:	11.7	11.7	13.8

grown), one for domestic consumption, and the other for cotton to be exported. Under this program the Ministry of Agriculture will determine before October 1 of each year the proportion of the current crop (not to exceed 20 percent) which may be exported. The price the producer receives for the proportion to be exported will then be reduced by about 30 percent. In actual practice, the grower will receive a composite price based on the amount of cotton authorized for export. For example, the domestic support prices for the 1963 season ranged from 13.00 to 17.00 pesetas per kilogram of seed cotton depending on grade, or about 28 to 36 U. S. cents per pound of lint cotton.

In some areas cotton output has expanded at the expense of food crops (mostly wheat); in other areas newly irrigated land is being used for cotton. Conditions in several other regions are excellent for cotton except for a lack of sufficient water. Irrigation projects are expected to eliminate this shortcoming. Continued subsidization of cotton by the Spanish Government should provide the incentive needed for increasing production, at least until Spanish domestic cotton requirements are satisfied.

At the present time fees and taxes on imported raw cotton amount to almost 50 percent of the c.i.f. price of imported cotton.

The purpose of these levies is to bring the price of imported cotton up to the supported price level of domestic cotton.

The Government is planning to bring a total of 230,000 acres of cotton under irrigation in the main growing area of Cordoba-Seville. Additional plans are being made to bring another 200,000 acres of cotton under irrigation northwest of this area, around Badajoz. Most of this land is dry land, but with irrigation the acreage planted to cotton should continue to increase, though at a much slower rate than in recent years. If the support price to farmers is reduced to world levels, expansion of cotton acreage will be very slow until yields are increased and production costs reduced. However, a continuation of the present Government pricing policy plus increasing domestic demand should keep prices at a favorable level, attracting new producers and encouraging farmers now growing cotton to plant additional acreage.

Spain imports cotton under two separate regulations, one dealing with replacement stocks for textile export purposes and the other with regular commercial imports:

(1) Replacement stocks may be imported free of import taxes or other assessments. Any exporter may import cotton equivalent to the amount of cotton used in his textile exports. Upon presentation of evidence that exports have been made, the exporter is issued a certificate which permits the importation of cotton free of assessments and providing a refund for any import duty which he might have to pay.

(2) Regular commercial imports may be made only with import licenses issued by the Ministry of Commerce. Under the present arrangement, the import license issued goes to the Commercial Service of the Cotton Textile Industry (SECEA). ^{9/}

Imports.--In 1962/63, imports amounted to only 8,000 bales of special grades and staple lengths, compared with 352,000 bales in 1961/62, and an annual average of 290,000 since 1955. The small imports expected for 1962/63 are the result of the unusually

^{9/} SECEA (Servicio Comercial de la Industria Textil Algodonera), a semigovernmental organization, is the management section of the cotton textile syndicate.

large carryover and a high domestic cotton crop. Only 1,100 bales were imported during the first half of the 1963/64 season (July 1, 1963, to January 31, 1964, mostly from the United States. This compares with imports from the United States for the first half of 1961/62 of 155,000 bales and for the whole marketing year, 1960/61, 171,000 bales.

The United States, since 1951, has supplied by far the greater amount of raw cotton imports. However, with Spain's domestic cotton production expanding, U. S. cotton is expected to meet increased competition.

From 1946 to 1950 cotton imports accounted for 59 percent of the total value of agricultural imports from the United States and about 27 percent of the value of Spain's total agricultural imports. During 1951-55, cotton imports from the United States dropped to 49 percent of all U. S. agricultural imports, but increased to 44 percent of total Spanish agricultural imports. The relative importance of cotton imports from the United States decreased primarily because of increased wheat and coarse grain imports from the United States. Since 1958, U. S. cotton has continued to decline in relative importance and the value of U. S. exports to Spain in 1963/64 are expected to be insignificant.

Beginning in 1954, practically all shipments of U. S. cotton to Spain were made under the Mutual Security Act and the Public Law 480 program. These shipments from 1954 to 1963 amounted to almost \$120 million.

In comparison Spain exported about 100,000 bales of cotton from the 1962/63 crop. However, in the future, Spain will find it difficult to export cotton because its domestic support price is well above the world price.

Demand for manufactured goods.--Spain's exports of manufactured cotton goods declined from \$16.2 million in 1952 to \$5.4 million in 1958. Since then exports rose to \$44.3 million in 1960 but declined to \$21.4 million in 1962. It seems that the competitive advantage once held by the Spanish cotton textile industry is gradually being lost because of increased labor costs and a widening margin of efficiency between other cotton textile exporting countries and Spain. According to official Spanish

export statistics, exports of manufactured cotton goods to the United States over the past 10 years have moved from only minor amounts during 1953-57 to \$7.7 million in 1960.

Spain's ability to continue its cotton textile exports at the present level will largely depend on future domestic demand, the successful modernization of Spain's textile industry, and developments in wage rates. Spain's comparative advantage in the world textile market may possibly worsen if wage increases move faster than increased plant efficiency.

On the basis of population alone, Spain could be one of the biggest markets for cotton and cotton goods in Western Europe, since it ranks fifth in population after West Germany, the United Kingdom, France, and Italy. However, the demand for textile fabrics is also partly determined by available per capita income, which in Spain is relatively low, but increasing (appendix table 23). Spain thus remains a major potential market for raw cotton and cotton textiles.

Competition.--As population continues to increase along with an anticipated rise in per capita income, cotton consumption by Spanish mills will probably continue the rapid expansion of the last decade.

Consumption of raw cotton has increased substantially since 1955. This increase resulted from rising consumer purchases due to increasing per capita income, and to expanding exports of manufactured cotton goods. In 1961/62, consumption reached a peak of 620,000 bales, about 50 percent more than the 1955/56 consumption of 415,000 bales. The moderate decrease since 1961/62 to 550,000 bales reflected a decline which affected most of the world.

Although Spain has been a traditional manufacturer and exporter of textile fabrics there has been relatively little investment of capital to modernize textile mills. Most of the mills are small with antiquated machinery. Of the 249 spinning mills in 1961, 32 percent had less than 5,000 spindles, and about 41 percent of the machinery had been installed before 1920. Of the 855 weaving mills in that year, 90 percent had less than 100 looms and 52 percent had machinery that was at least 100 years old.

While the above information indicates a low output per worker, a compensating factor was, until recently, that wages in these mills were also low. In December 1961 a decree was passed that male and female workers were to be paid equal wages for equal work. In addition, in January 1963 the minimum wage for men and women was increased from 60 cents to \$1.00 per day.

Meat Production

A real potential exists in Spain for the development of a livestock industry for meat production. Per capita consumption of all meat had been fairly stable from the pre-Civil War consumption of 27 pounds per person until 1956, but since then it has increased steadily, reaching an estimated 49 pounds (still among the lowest in West Europe) in 1963.

The consumption of pork has been increasing rapidly. Pork is supposedly the preferred meat in the daily diet of many Spaniards (appendix table 22). From an average of 14 pounds per person per year during 1951-55, the apparent consumption of pork increased to 23 pounds in 1963.

In this study only data from supervised slaughterhouses were included. If data from unregistered slaughterhouses were also available and included, it might very well show that pork accounts for almost 50 percent of all meat consumed in Spain. Apparent consumption of pork has increased much more rapidly than that of beef, lamb, and mutton since the mid-1950's.

Beef and veal production fluctuates widely primarily because of the lack of a planned livestock program. This lack necessitates imports which also fluctuate according to the import price. Beef consumption nevertheless is increasing rapidly, from 10.2 pounds per person per year during 1951-55 to 15.2 pounds during 1963 (appendix table 22). This trend in consumption is reassuring to the advocates of a meat-livestock program for the Spanish farmer.

Production and consumption of mutton and lamb have increased only slightly in recent years. Of the supply available for consumption, about 75 percent is mutton. The lower rate of increase of lamb production and consumption is probably due to

the fact that the Spanish farmer considers production of wool more important than production of meat. Other factors influencing a lower rate of lamb consumption are inadequate distribution facilities, the generally lower prices for beef, veal, and pork, and also the failure of the Spanish to initiate a well-developed lamb industry.

Consumption of goat meat has decreased in the past decade. Because of little demand, consumption will probably decline even more in the future, especially if per capita income for the majority of the people continues to increase.

These meat consumption relationships probably will be maintained because the Spanish Government has developed plans for a more progressive livestock program to supply the increasing demand for the more desirable types of meat. Meat production could be increased if calves were fed longer before slaughter. Under present practices calves weigh less than 130 pounds, dressed. This policy is followed because the farmer is usually in need of ready cash and sells his calves as soon as possible. The other necessary improvement is the need for a different type of hog. The present type has too much fat. The average dressed carcass has 50 percent fat, 40 percent lean, and 10 percent bone. The usual practice followed by farmers is to permit the hogs to graze in open fields with only acorns as the principal food until fattening time; however, there are a few progressive farmers who are adopting the techniques of commercial hog producers in the United States.

An indication, though of the increasing Government emphasis upon livestock production is the recent initiation of an artificial insemination program (Servicio de Inseminacion Artificial Ganadera). In 1960 there were 234 bulls giving service. A total of 170,706 cows of all breeds were inseminated artificially.

However, assuming that meat consumption follows recent trends, Spain is expected to almost double per capita consumption of meat by 1975. ^{10/} On this basis, meat animal numbers would also have to double. Spain may have difficulty in providing the necessary feed grains to meet this substantial increase in livestock numbers.

^{10/} "Modernizacion De La Agricultura", Cuaderno No. 3, Documentacion Tecnica, I Congreso Sindical, Madrid, 1961, p. 75.

Poultry and eggs

The Spanish poultry industry has expanded rapidly during recent years in both meat and egg production, responding to increased demand for broiler meat and efforts to reach self-sufficiency in egg production.

One difficulty in estimating Spanish poultry meat production is that only a small proportion (about 10 percent) of the estimated total production is slaughtered in plants which are inspected and reported by authorities. Large numbers of poultry are sold alive and slaughtered in retail shops. In addition, every small farm, indeed every residence in rural areas, has its backyard flock of chickens. There is no way to estimate the number of rural flocks which more or less shift for themselves. However, as a result of an intensive study concluded by the Spanish Livestock Syndicate in 1963, which included visiting 60,000 farmers, more reliable data are now being made available on poultry meat production.

Imports of baby chicks and eggs for hatching were liberalized on August 27, 1962. This was an important decision and facilitated the rapid expansion of the poultry industry during 1962. Production of poultry meat for 1959 through 1962 is given below.

<u>Year</u>	<u>Poultry Meat Production</u>
	<u>1,000 short tons</u>
1959.....	52.5
1960.....	58.4
1961.....	67.9
1962.....	120.2

Because of the many backyard flocks in Spain, there is a large number of chickens of no definite breed. However, there has been a marked increase in the number of specialized breeds and a decline in the number of nonspecialized breeds--that is, an increase in commercial poultry production and a decline in the so-called backyard farm flocks. Since 1958, the estimated number of hens of specialized breeds has increased from 3 million to 18 million head, while the number of nonspecialized hens decreased from an estimated 29 million to 24 million (table 13).

Table 13.--Spain: Number of chickens, specialized and nonspecialized, 1958 to 1962

Breed	1958	1959	1960	1961	1962
	----- Millions -----				
Specialized breed.....	3	3	6	14	18
Nonspecialized breed....	29	30	26	26	24
Total	32	33	32	40	42

The increase during the period was primarily in the Leghorn breed.

Production of eggs in 1962 was estimated at 525 million dozen compared with 245 million in 1958. This increase was due largely to improved management and better feed and feeding practices. The rapid increase in egg production has led to a decline in egg prices. Further price declines may be forthcoming with increasing efficiency in both production and marketing (table 14).

Because of increased production, imports of eggs for human consumption have been decreasing annually except for 1962 when there was a temporary domestic shortage in December. Egg imports for 1962 amounted to 777,225 dozen compared with 294,340 dozen in 1961. Imports of hatching eggs totaled 41,583 dozen in 1962 compared with 46,090 dozen in 1961. This decrease reflects the development in production of hatching eggs in Spain rather than a decrease in their use.

In 1961, Spain imported almost 1.4 million baby chicks, compared with 516,391 in 1960. The United States supplied most of the baby chicks (table 15). Imports of poultry meat have been erratic and never in significant amounts. For example, Spain imported 237 short tons of poultry meat during 1962 compared with 93 short tons in 1961. The big increase in 1962 came in October, November, and December in response to a general meat shortage and higher pork, beef, and veal prices.

Table 14.--Spain: Egg prices and margins, 1958 to 1962

Item	Average annual price per dozen				
	1958	1959	1960	1961	1962
	- - - - - U. S. cents - - - - -				
Paid to producer.....	45.1	43.4	46.8	41.8	38.4
Wholesale margin.....	4.7	4.7	4.7	4.7	4.7
Retail margin.....	5.0	5.0	5.0	5.0	5.0
Retail price.....	54.8	53.1	56.4	51.4	48.1

Table 15.--Spain: Imports of poultry and poultry products from the United States, 1956 to 1962

Year	Shell eggs		Baby chicks and live poultry
	Consumption	Hatching	
	1,000 dozen	1,000 dozen	1,000 head
1956.....	4,857	0	1/
1957.....	154	0	1/
1958.....	4,687	0	5
1959.....	3,354	0	34
1960.....	0	27	262
1961.....	0	65	957
1962.....	8	51	918

1/ Less than 5,000.

Eggs are the only poultry product exported other than in token amounts. In 1962, egg exports exceeded imports for the first time in history. The fact that Spain has moved from an importer of over 14 million dozen eggs in 1957 to a net export position of 362,807 dozen eggs by 1962 emphasizes the development of Spain's poultry industry.

Because of the high cost of mixed feeds for poultry in Spain, it will be difficult for Spain to compete on the world egg market

except perhaps for seasonal exports. The cost of producing eggs commercially is estimated at 1.82 pesetas per egg (36 cents per dozen). Despite these high prices, the use of mixed feed for layers has been expanding rapidly.

Assuming that Spanish egg consumption will increase in response to increased purchasing power and a gradual change in eating habits, the expansion of the poultry industry will still be limited to meeting this rise in domestic egg demand. Present technology in the poultry industry requires little hand labor per unit of output, but this is about all that Spanish poultry farmers have to offer.

A rapidly growing portion of the poultry industry is the turkey sector. The 1955 census reported 416,000 turkeys in Spain, this number increased to 549,000 by 1960, a rise of 32 percent.

Commercial turkey production is limited almost entirely to the southern area of Spain, as indicated below.

<u>Province</u>	<u>Number 1/</u>
Murcia	97,182
Coruoba	55,603
Almeria	47,866
Cadiz	41,014
Granada	40,638
Sevilla	35,178
Badajoz	32,882
Albacete	18,886
Jaen	18,560
Other	161,841
	549,000

1/ Turkeys over 6 months old.

In spite of the still small number of turkeys being raised in this restricted area, Spain does have almost ideal climatic conditions for expanding commercial turkey production. With a growing demand in Spain for meat and meat products, the turkey sector may well become a more important portion of the poultry industry.

Feed Grains

Spain's economic growth has now progressed to where further increases can be expected in the consumption of livestock and poultry products, most of which can be produced in Spain. Because of the increased demand for livestock products and the attendant rise in livestock numbers, feed grain production, imports, and consumption have been increasing (table 16).

Table 16.--Spain: Feed grain production, total imports, and amount available for consumption, annual 1956/57 to 1962/63

Year ^{1/}	Production				Total feed grain imports	Total available for con- sumption
	Barley	Oats	Corn	Total		
	----- 1,000 short tons -----					
1956/57...	1,709	498	787	2,994	101	3,095
1957/58...	2,073	590	850	3,513	96	3,609
1958/59...	1,959	572	1,009	3,540	175	3,715
1959/60...	2,305	577	1,057	3,939	262	4,201
1960/61...	1,721	475	1,115	3,311	329	3,640
1961/62...	1,922	545	1,176	3,643	677	4,320
1962/63...	2,383	565	1,014	3,962	777	4,739

^{1/} Production and trade are on a calendar year basis for the first year shown. Total available refers to the split year.

Increased demand for feed grains is shown in table 16 under total available for consumption. The 1962/63 supply of 4,739,000 short tons of feed grains is almost 800,000 short tons higher than the top production year of 1962/63. This gap between production and demand is steadily increasing, as evidenced by imports. It is doubtful whether domestic feed grain production will meet the demand of the growing livestock and poultry numbers in the foreseeable future. Thus Spain will probably continue to require substantial feed grain imports, even in years of good harvests.

Potential feedgrain production is somewhat limited, however, because the Government requires the farmer to devote a specified

minimum proportion of his arable land to wheat growing (the most recent figure was 25 percent). In addition, the decree of October 1956 made feed grain production compulsory. This decree also provides for the cultivation of forage crops in 30 of Spain's 50 provinces. The percentage of land affected ranges from 15 to 20 percent, but applies only to farms between 250 and 620 acres.

The National Wheat Service fixes support prices for feed grains and controls all imports of feed grains by determining import needs. Imported grain is allotted by the Service to the mills, feed manufacturers, and livestock feeders. All grain transaction profits revert to the National Wheat Service. The imported grain is sold by the Service at a price determined by the domestic support price plus a fixed markup. For example, the price of imported corn was \$53.94 per ton while the domestic price, based on the domestic support and markup, was \$61.66. It is significant that in spite of these high prices and price spread, corn imports alone amounted to 334,355 short tons in 1961, reflecting the strong demand for feed grains.

In addition, the National Wheat Service, following enactment of a law on June 5, 1963, purchases domestic and foreign seeds for the production of barley, oats, corn, and grain sorghums. The Service is also authorized to distribute these seeds among growers at cost plus related expenses. Funds are advanced by the Service to feed grain producers for the purchase of fertilizers. The construction of a network of drying and storage facilities for corn and grain sorghums is also the responsibility of the National Wheat Service. However, they must be financed by the individual farmer or cooperative with 20 percent of the total cost being advanced by the Wheat Service and the remainder, if necessary, by the NIC.

The National Wheat Service will be compelled to buy feed grains at support prices if offered by farmers; prices will be set each year by the Government. For the 1963/64 season support prices will be:

Barley (June through	
September).....	\$3.07 per 100 pounds
Oats (June through September)..	\$2.65 per 100 pounds
Corn (August through	
November)	\$3.29 per 100 pounds
Sorghums (August through	
November)	\$3.18 per 100 pounds

Feed grain and other feed imports, practically all from the United States, have been increasing (table 17). The United States did not export grain sorghums to Spain prior to 1958. Large exports of U. S. grain sorghums were made to Spain in 1958 and 1959. There were none in 1960, but 31,770 short tons were shipped in 1962. The potential for U. S. exports of grain sorghums to Spain is excellent as the crop is less susceptible than either corn or barley to competition from other countries. Soybean cake and meal imports, first introduced by the United States into Spain in 1955 in token amounts, increased to 43,704 short tons in 1962.

Table 17.--U. S. exports of wheat and certain feed grains to Spain, (excluding Canary Islands), average 1947-50 and 1951-55, annual 1956 to 1962

Year	Wheat	Corn	Grain sorghums	Soybean cake and meal
----- Short tons -----				
Average,				
1947-50..	16,920	4,984	0	0
1951-55..	183,090	28,224	0	<u>1/</u>
1956.....	21,780	86,576	0	5,892
1957.....	20,370	64,120	0	550
1958.....	0	90,888	43,568	2,034
1959.....	0	145,432	25,760	54,094
1960.....	207,120	152,320	0	75,980
1961.....	1,022,697	334,355	263	40,000
1962.....	387,810	260,715	31,770	43,704

1/ The first shipment of soybean cake and meal to Spain was 58 tons in 1955.

There are 240 mills in Spain producing commercial feed. Some of these mills can produce 3 tons an hour at capacity performance and are considered to be among the most modern in Europe. However, in comparison with animal feed-producing mills in the United States, this capacity would be considered a "small" mill. Total production, which is entirely consumed in Spain, was only about 900,000 short tons in 1961, of which 75 percent was consumed by the poultry industry.

Indications are that Spain will continue to be an attractive and expanding market for feed grains and protein feed supplements because of the increasing demand and consumption of meat and meat products.

Wheat

Production.--Wheat is by far the leading grain crop of Spain. It is the only food grain of importance grown in all parts of the country. The central plateau of Spain is the most important wheat growing area. About 23 percent of the cropland in Spain is allocated for wheat--current crop and fallow. Most of the wheat grown is under a rotation system of cropping and fallow in alternate years or even allowing the land to lie fallow for 2 or more years before putting in another crop of wheat. Of the total wheat crop about 20 percent is hard wheat.

A semiautonomous Government agency, the National Wheat Service (Servicio Nacional del Trigo), completely controls the wheat industry. It determines how much wheat must be raised, depending on the current situation, provides seed, fertilizer, advice on farming, and financial credit to farmers. The Service also fixes prices for wheat and then provides the only outlet for the farmers to sell their wheat. Premiums are paid by the Service on wheat kept in storage; these premiums increase monthly. The purpose of the premiums is to encourage more uniform distribution throughout the season. The Wheat Service does not allow wheat to be fed to animals except in years of short crops of feed grains and then only with its consent.

This complete control of a basic food assures Spain of a regular and systematic provision of wheat for milling. This system also protects the farmers from price fluctuations when unpredictable weather greatly affects production.

The Government encouraged wheat production from 1946 to 1956, and the area sown to wheat increased by almost 900,000 acres, to 10.7 million acres. Acreage controls were established and premiums were offered to farmers who voluntarily cleared their lands of vineyards for the production of wheat. However, because of the various Government incentives directed to increasing wheat production, too much submarginal land was devoted to

this crop. Emphasis on land utilization was renewed in 1955 and plans were put into operation to reforest as much as possible of the submarginal land planted to wheat. Consequently, wheat acreage decreased since 1956 to 9.6 million acres in 1962.

Over the years Spain has had difficulty in building up wheat stocks in the event of crop failures. In addition, there are many areas where yields are very small. In an attempt to contend with local wheat shortages, a storage system was started which consisted of a large number of small silos and granaries scattered throughout the country. As of October 1962, wheat storage capacity was divided between 247 silos and 235 granaries holding 705,766 and 251,421 short tons respectively. Stored wheat represents about 20 percent of annual production. Present plans are to increase wheat and other grain storage capacity to 608 silos holding 1.4 million short tons and 1,661 granaries with a capacity of 2.3 million short tons.

Trade.--Wheat has not been a consistently important U. S. export to Continental Spain (table 17). However, in years of poor harvests, U. S. exports have helped to alleviate food grain deficits.

In projecting Spain's future wheat production, consideration must be taken of the many factors affecting production. It is almost impossible to forecast wheat yields or total production with any reliability because of the variability and uncertainty of Spanish rainfall. There has been, however, some increase in the use of certified seed and in the control of pests and diseases, but, on the whole, very little change in the cultural practices which have been followed for centuries. A further deterrent to increased wheat yields has been the loss of natural fertility of lands, plus serious erosion and flooding in some areas. There has also been a shift in land use, after it is placed under irrigation, resulting in a loss of wheat area to sugarbeets, cotton, potatoes, corn, fruits, and vegetables.

Except for the possibility of increased wheat acreage on irrigated land, which is unlikely due to competition from other crops, the area planted to wheat is expected to decrease. This decrease is forecast because (1) the greater part of the land suitable for wheat production has been in use for many years, limiting the amount of new land available, and (2) livestock production is being stressed by the government. This probably will shift some land from wheat to feed grain production or even pastures.

Table grapes

Production.--Grapes are raised throughout Spain, although they are mostly used for making wine. The major area for production of the most popular export variety of table grapes is the Almeria district in the Levante Province of southeast Spain. These grapes enjoy a special position in the market because they are the late-maturing varieties of Ohanes and Chelva. The province of Murcia is the next most important area for producing table grapes.

The table grape area and production increased significantly between 1951 and 1958 (table 7). However, table grape acreage declined since 1958 due to a reorientation of vineyards. Instead of raising ordinary grape varieties there is a trend toward a higher quality grape suitable for use both as a table grape and for processing into grape juice. Since these grapes are indigenous to only one area--around Almeria--there is little likelihood of their production expanding greatly.

Exports.--Spain is the world's second largest exporter of table grapes, ranking next to Italy. In recent years Spanish exports of these grapes have expanded considerably, reflecting increased production and relaxation of import controls by importing countries. Also, the demand for table grapes has increased due to improved economic conditions in importing countries. Spain is the most important exporter of the late variety table grapes (Ohanes and Chelva varieties). Exports usually extend from late September to January of the following year, with the heaviest period in November and December for the Christmas holiday season.

Spanish exports of table grapes have risen in value from 2.7 percent of total agricultural exports for 1946-50 to 3.1 percent for 1961--not a very impressive relative gain but an absolute export value increase from \$3.2 million to \$10.6 million.

Although exports of Spanish table grapes have been less impressive than those of Italy, Spanish exports reached a record 101,181 short tons in 1961. The special late variety table grapes from Almeria usually account for between 35 and 45 percent of total table grape exports.

In 1956 Spanish shipments of table grapes to West Germany and the United Kingdom rose considerably but declined in 1957 and

1958, because of a general drop in production. Exports reached new records in 1961 with West Germany being Spain's largest customer and the United Kingdom second (table 18). The 40 percent drop in exports in 1962 resulted from a much higher domestic demand.

Most of the late season (Ohanes and Chelva variety) table grapes are shipped to the United Kingdom. A special type of railway car that rolls on any gauge track in Europe transports them in 5 days. Therefore, no handling of the fruit is necessary until the final unloading. The bulk of the remaining grapes go to West Germany.

Spain's table grape markets generally cover a wider area than those of other grape exporting countries. In addition to the countries shown in table 18, several countries of the Far East are traditional importers, (including Malaya, and the colony of Hong Kong).

Competition.--The industrial nations of central and northern Europe, where purchasing power is relatively high, provide an important market for table grapes. Grapes from Spain compete in this area with grapes from other Mediterranean countries and California. Spain's greatest competition is with California grapes for the United Kingdom and Scandinavian markets.

Table grape consumption in the European importing countries is slowly increasing. Per capita consumption figures for selected West European countries for 1959 indicate a trend toward increasing consumption.

If countries with less than 2 pounds per capita consumption could raise this to equal the per capita consumption of, for example, Norway, Spain's exports would increase to about 300,000 short tons annually.

Consumption of table grapes in selected West European countries in 1959 is given below:

<u>Country</u>	<u>Pounds per capita</u>
Netherlands	0.2
Denmark	0.8
Belgium	0.8
United Kingdom	1.9

Table 18.--Spain: Exports of table grapes to principal importing countries, average 1946-50 and 1951-55, annual 1956 to 1962

Country	Average: 1946-50:	Average: 1951-55:	1956	1957	1958	1959	1960	1961	1962
----- Short tons -----									
West Germany.....	105	9,800	29,208	25,402	15,470	26,247	26,650	48,778	23,262
United Kingdom.....	7,056	11,981	15,502	11,726	13,822	16,224	20,649	26,764	17,161
Sweden.....	2,236	5,391	2,074	1,737	1,708	2,746	2,954	6,047	5,195
Switzerland.....	594	2,480	5,528	5,549	6,749	5,132	4,688	5,830	1,852
Denmark.....	36	1,329	2,380	918	1,744	1,689	1,855	3,438	2,010
Norway.....	0	249	3,551	422	1,397	2,489	2,540	2,980	2,967
France.....	258	2,973	5,705	3,071	2,049	1,647	2,039	1,514	1,975
Finland.....	0	74	1,498	887	1,677	1,436	1,013	1,312	982
Austria.....	0	36	66	2,347	2,632	461	506	490	30
Others.....	2,285	5,472	3,874	3,379	3,647	4,638	35,107	4,028	2,594
Total.....	12,570	39,785	69,386	55,438	50,895	62,709	98,001	101,181	58,028

<u>Country</u>	<u>Pounds per capita</u>
Finland	2.9
Sweden	4.3
Norway	4.4
West Germany	7.7
Switzerland	8.3
France	9.5

Production and export data indicated that trade in table grapes is steadily expanding. However, this trade is essentially intra-European. Except for shipments of South African grapes to the United Kingdom, supplies from other non-European sources are unimportant and limited to the European out-of-season trade.

The future for Spanish table grape exports appears increasingly favorable. Consumption in importing countries is increasing. Spain is making strenuous efforts to export a more acceptable table product to improve its share of these growing markets. Spanish grapes, in many areas, are no longer packed for shipment when they are picked in the vineyards. They are now taken directly to packing stations after picking where they are checked closely for fruit defects and to control quality.

Raisins

In addition to table and wine grape consumption, an increasing amount of grapes is dried annually for the raisin industry.

Raisins have been produced in Spain for many years. Two varieties are grown commercially for export in separate regions. The difference in the climate of these regions has resulted in two distinct types of raisins which do not compete with each other. In one region, Malaga, where the climate is exceptionally favorable, the grapes are sun dried. In the other region, Valencia-Alicante, north of Malaga, the climate is less favorable for sun drying and the grapes are dipped in a weak lye solution before drying.

The estimated total commercial production of raisins increased from 8,265 short tons during 1946-50 to 11,000 short tons in 1962. Exports, however, have not kept pace with increased production. During 1946-50 an average of 5,357 short tons of raisins were exported, almost as much as the 5,360 short tons exported in 1962. The United Kingdom, France, and Algeria are the most important customers for Spanish raisins; none of these countries, however, dominates the market.

OUTLOOK

With the improvement in Spain's gold and dollar reserves plus its liberalization of approximately 75 percent of agricultural imports, the United States should be able to sell more agricultural products to Spain. However, to meet competition in Spanish markets, U. S. traders will have to equal or overcome the advantages that other third country exporters enjoy. Some of these advantages are: Lower per unit production costs, lower transportation costs, custom packaging according to the particular specification set by the Spanish buyer, and availability of credit, which foreign suppliers readily offer to Spanish buyers.

As Spain's economic growth continues, resulting in increases in per capita incomes, we may expect the Spanish government to encourage substantial increases in agricultural production. The resulting rise in farm output may lead to increased competition for many U. S. farm products on the Spanish market.

Currently, the incorporation of Spain into the European Economic Community (EEC) is of major interest to the leaders of the Spanish agricultural community. In Spain's application for EEC membership (February 1962), it was implied that a number of concessions by EEC members would be needed to allow Spain to bring the economy of the country up to a more fully developed stage before attempting to meet the stiff competition which would come from the highly industrialized EEC countries. If Spain does not enter the EEC a high Spanish tariff protection may be levied against imports, reversing the current liberalization trend. Not only would this limit imports, but it would also have the injurious effect of raising domestic prices. In addition, the loss of Spain's export markets through nonassociation with the EEC would have a stagnating effect upon her industries, especially those now being developed.

Among the most important benefits that Spain would receive from EEC membership might be that the increased competition would further stimulate the economy of Spain, where output is already expanding and the standard of living rising. In addition, Spain could receive a better exchange of new ideas and techniques from close association with the other, more progressive European nations.

APPENDIX

Table 19.--Spain: Value of agricultural exports, total exports, and percent agricultural is of total, 1958 to 1962

Commodity	1958	1959	1960	1961	1962
- - - - - Million U.S. dollars - - - - -					
Live animals	0.5	0.5	1.2	2.0	1.9
Food					
Meat	1.2	1.7	1.8	1.3	0.7
Dairy products and eggs	0.1	0.3	0.4	1.0	0.8
Cereals	30.7	26.4	3.8	10.7	7.3
Fruits and vegetables	187.0	197.4	237.3	241.5	260.7
Sugar	2.0	2.4	1.5	1.1	1.3
Coffee, cocoa, tea, spices	5.6	4.2	5.2	3.8	4.3
Animal feed	0.2	0.2	0.9	0.1	1.5
Misc. food preparations	0.2	0.3	0.7	1.1	0.5
Beverages	47.6	30.6	28.5	31.3	34.4
Agricultural raw materials					
Unmanufactured tobacco	0.5	0.2	0	0	0
Hides and skins ..	0.9	2.9	4.6	6.2	10.3
Oilseeds	0.1	0.2	0.5	0	0.2
Natural rubber ..	0	0	0	0	0
Natural fibers ...	0.4	1.2	3.0	2.6	5.2
Crude animal and vegetable material n.e.s.	4.5	4.6	5.8	9.2	7.0
Fats and oils	13.7	21.9	70.7	68.2	45.0
Other agricultural products ..	11.4	13.6	17.9	19.9	21.1
Total agricultural exports	306.6	308.6	383.8	400.0	402.2
Total exports	485.8	500.6	726.1	708.7	737.5
Percent agricultural is of total ...	63.1	61.6	52.8	56.2	54.5

Table 20.--Spain: Value of agricultural imports, total imports, and percent agricultural is of total, 1958 to 1962

Commodity	1958	1959	1960	1961	1962
- - - - Million U.S. dollars - - - -					
Live animals	0.7	0.5	0.7	1.6	2.1
Food					
Meat	20.6	10.1	8.2	6.6	29.4
Dairy products and eggs	4.2	6.0	3.4	3.5	8.6
Cereals	8.3	16.7	13.7	107.0	93.0
Fruits and vegetables	7.4	7.0	7.1	8.4	12.1
Sugar	16.6	4.1	2.7	4.3	3.9
Coffee, cocoa, tea, spices	7.5	14.8	10.1	14.5	18.0
Animal feed	0.6	0.7	4.3	9.2	16.2
Misc. food preparations	0.3	0.8	1.1	2.2	3.0
Beverages	1.0	0.3	0.7	1.4	2.2
Agricultural raw materials					
Unmanufactured					
tobacco	21.1	19.2	17.8	23.7	23.5
Hides and skins ..	5.1	3.8	5.7	8.4	19.5
Oilseeds	2.3	2.0	3.7	5.3	12.9
Natural rubber ..	15.9	16.5	20.9	14.7	21.2
Natural fibers ...	80.2	61.5	35.1	72.7	76.5
Crude animal and vegetable material n.e.s.	7.2	3.9	3.9	8.7	6.1
Fats and oils	52.8	50.7	36.9	48.7	68.6
Other agricultural products ..	7.4	4.0	3.3	3.0	2.8
Total agricultural imports	259.2	222.6	179.3	343.9	418.8
Total imports	872.5	794.9	721.5	1,092.2	1,572.6
Percent agricultural is of total ...	29.7	28.0	24.8	31.4	26.6

Table 21.--Spain: Cotton acreage, supply, and distribution, 1956 to 1963

Year ^{2/}	Acre- age	Beginning Stocks	Produc- tion	Imports					Total Supply	Consump- tion	Ex- ports	Ending Stocks	Destroyed	
				United States	Brazil	Egypt	Mexico	Other						Total
	:1,000 Acres			1,000 bales ^{1/}										
1955....	406	185	161	146	61	8	0	1	216	562	415	0	140	7
1956....	494	140	232	174	29	5	15	3	226	598	460	0	125	13
1957....	396	125	165	194	18	41	14	4	271	561	475	0	85	1
1958....	417	85	191	322	0	48	28	60	458	734	475	0	252	7
1959....	557	252	295	39	0	11	40	5	95	642	560	0	74	8
1960....	616	74	330	191	38	22	75	14	340	744	580	0	160	4
1961....	788	160	490	133	42	65	103	9	352	1,002	620	8	370	4
1962....	855	370	505	5	0	2	1	0	8	883	550	100	230	3
1963 ^{3/}	650	230	450	na	na	na	na	na	75	755	550	20	185	0

^{1/} Bales of 480 pounds net weight.

^{2/} Crop year begins August 1, of each year.

^{3/} Preliminary.

Table 22.--Spain: Calculated per capita meat consumption by kind, 1946 to 1963 ^{1/}

Year	Beef and veal	Pork	Mutton and lamb	Goat
----- Pounds -----				
1946.....	6.1	8.3	4.3	1.2
1947.....	6.1	9.8	3.9	1.0
1948.....	9.8	12.0	4.9	1.1
1949.....	9.5	11.2	4.5	1.0
1950.....	7.4	11.5	5.4	1.1
1951.....	6.0	11.5	4.9	1.1
1952.....	12.7	14.6	6.6	1.1
1953.....	10.1	14.8	5.7	1.1
1954.....	11.2	14.7	6.1	1.2
1955.....	11.1	14.6	5.8	1.1
1956.....	11.1	16.0	6.3	1.0
1957.....	12.9	17.0	6.4	0.9
1958.....	12.6	17.3	6.0	0.9
1959.....	12.6	17.8	6.5	0.9
1960.....	12.9	19.5	8.3	0.9
1961.....	13.5	18.2	7.7	0.8
1962.....	15.0	19.0	7.5	0.7
1963 ^{2/}	15.2	22.7	6.8	0.7

^{1/} In carcass weight. Includes only inspected slaughterhouse production plus net trade of carcass weight meat.

^{2/} Forecast.

Table 23.--Spain: Net domestic product, population, and per capita income, annual 1956 to 1962

Year	Net domestic product <u>1/</u>	Population <u>2/</u>	Per capita income
	Million dollars	Millions	Dollars
1946.....	1,512	26.3	57
1947.....	1,700	26.5	64
1948.....	1,754	26.7	66
1949.....	1,872	26.9	70
1950.....	2,312	27.1	85
1951.....	3,492	27.3	128
1952.....	3,688	27.5	134
1953.....	3,811	27.7	138
1954.....	4,315	27.9	155
1955.....	4,538	28.1	161
1956.....	5,222	28.3	184
1957.....	6,141	28.5	215
1958.....	7,348	28.8	255
1959.....	7,732	29.0	267
1960.....	7,832	29.2	268
1961.....	8,317	29.6	281
1962.....	<u>3/</u> 9,560	30.1	<u>3/</u> 318

1/ Beginning 1958 data refer to net domestic product at factor cost; previous to 1958, national income at factor cost.

2/ All figures are official estimates except official census year data of 1950 and 1960.

3/ Preliminary.

SELECTED REFERENCES

Anuario Estadístico de la Producción Agrícola, Ministerio de Agricultura. Various issues.

Cifras de la Economía Española, Consejo Superior de las Cámaras Oficiales de Comercio, Industria y Navegación de España, Madrid, 1961.

Disponibilidades Alimenticias, Campanas 1952-53 a 1959-60, Secretaría General Técnica, Servicio de Estadística, Madrid, 1961.

Documentación Técnica, Congreso Sindical I, Madrid. Various 1961 issues.

Estadística del Comercio Exterior de España, Dirección General de Aduanas, Ministerio de Hacienda. Various issues.

Informe Sobre La Agricultura y La Alimenticia 1957-60. Presentado a la XI Sesión de la Conferencia de la FAO por el Comité Nacional, 1961.

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