

Chapter 1

Economic Importance of Peanuts

By J. FRANK MCGILL¹

Among crop plants in the world standing between mankind and starvation, peanuts rank thirteenth in importance (1). Although peanuts have been known to man for many centuries, their economic importance was not achieved until approximately 125 years ago. At that time, the oil mills of Marseilles, France began importing peanuts from West Africa and crushing them for oil. Such was the beginning of large scale use of the peanut crop for oil. The desirable qualities of peanut oil brought early success to this enterprise. Oil mills for crushing peanuts were then quickly established in other European countries and subsequently throughout the world, gradually expanding the commerce of peanuts to its present proportion.

During the three-year period of 1967-1969, an average of 44,970,000 acres of peanuts were grown annually throughout the world (Table 1). The average yield per acre was 803 pounds and total production was 18,066,000 tons (Farmers' stock basis). The peanut is now an important food and oil crop in the warmer areas of all six continents. India, the world's largest peanut producing country, has approximately 17 million acres. Three-fourths of all peanuts grown in the world are produced by India, mainland China, Nigeria, the United States and Senegal.

World trade in peanuts did not achieve significance prior to the development of the peanut oil industry. However, in every country where grown, peanuts were an

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important food crop for local trade. They were most commonly roasted in the shell and sold for immediate consumption. Peanuts were also used for making candy and other confections. While a paste similar to peanut butter may have been produced and used by South American Indians, utilization of peanuts in this type product had not reached commercial importance except in the United States. In Spain and in some Spanish-American countries, peanuts are ground, mixed with cocoa or honey and utilized for food; but the extent of the utilization is not documented.

Although peanuts today are used primarily as a vegetable oil crop, their importance as a food crop in world trade has increased substantially in recent years. Due to its high content of digestible protein, their use as an edible food crop is expected to increase further because of an increased awareness of the protein shortage existing in the world.

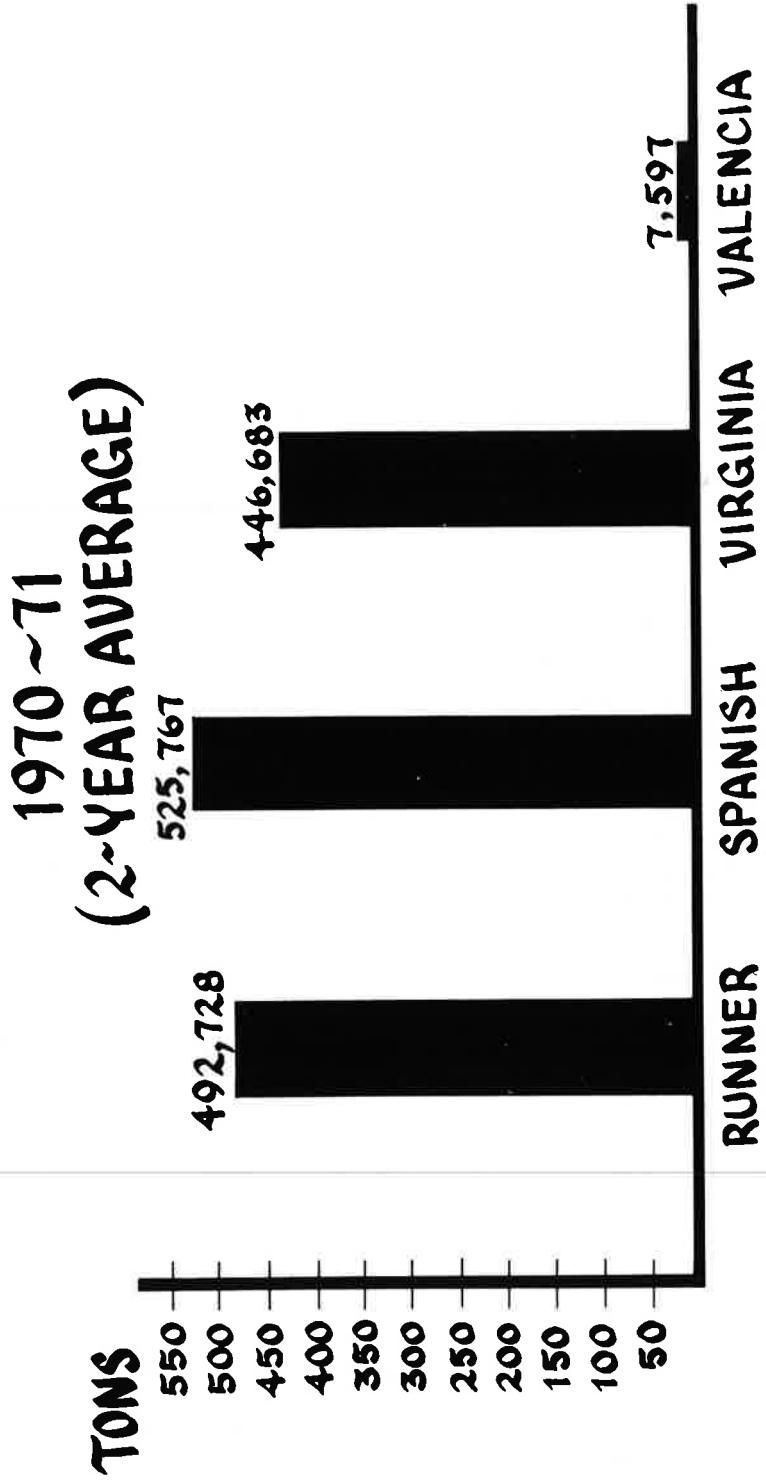


Figure 1. Photo of Modern Processing Plant.

Whether or not peanuts were grown within the present limits of the United States by the Indians of Pre-Columbian times is still questionable. However, authentic records do exist concerning the culture of peanuts during the Colonial period (2).

Thomas Jefferson (3) mentioned peanuts as being commonly grown in Virginia, but implied that the crop was of little importance commercially. Before the Civil War, peanuts were grown commercially for local consumption throughout the South and even in California. Ramsey (4) in his History of South Carolina, 1809, mentioned among vegetables, groundnuts used as a food, as a substitute for cocoa, and as a source of oil for domestic use. In discussing Edisto-Island, he again mentioned groundnuts, saying, "They are planted in small patches chiefly by negroes for market. They produce 80 bushels per acre. They are commonly sold for five shillings sterling per bushel. . . . price in 1768 was eight pence sterling per bushel." The fact that they were being grown commercially in South Carolina is shown also from records of exports from

FIGURE ~ 2
UNITED STATES PEANUT PRODUCTION BY TYPES *



* PEANUT MARKET NEWS ~ NOVEMBER 1972

the port of Charleston. We find a shipment of 51 casks of groundnuts recorded for the year November, 1786, to November, 1787. Williams (5), in discussing the agriculture of the Territory of Florida (1830) wrote: "The peanut produces a large crop and is a useful article in the dessert." Burke (6) in describing life on a slave-operated plantation near Savannah, Georgia, during the first half of the nineteenth century, says: "Great quantities of peanuts are raised there, not only as an article of export, but to fatten swine upon. They are planted in the same manner as potatoes and when they have come to maturity the swine are turned in upon them to dig their own food. It is not usual for planters to feed their swine in any other way . . ."

Several others writing from Georgia (7, 8), Alabama (9), Mississippi (10), Louisiana (11) and California (12) at about this date, spoke of peanuts as a valuable crop, especially for hog feed. In 1851, W. B. Easby (13) of Vernon, Tennessee, wrote: "The Goober pea is extensively raised here, and so far has proved the most profitable crop that can be raised. The first ever raised for market was sold in Nashville in the fall of 1845. Since that time there has been upwards of 20,000 to 25,000 bushels raised within 10 to 15 miles of this place each year, and sell for 65 cents to one dollar per 22 pounds. The vine is equal to clover hay for stock, if well saved."

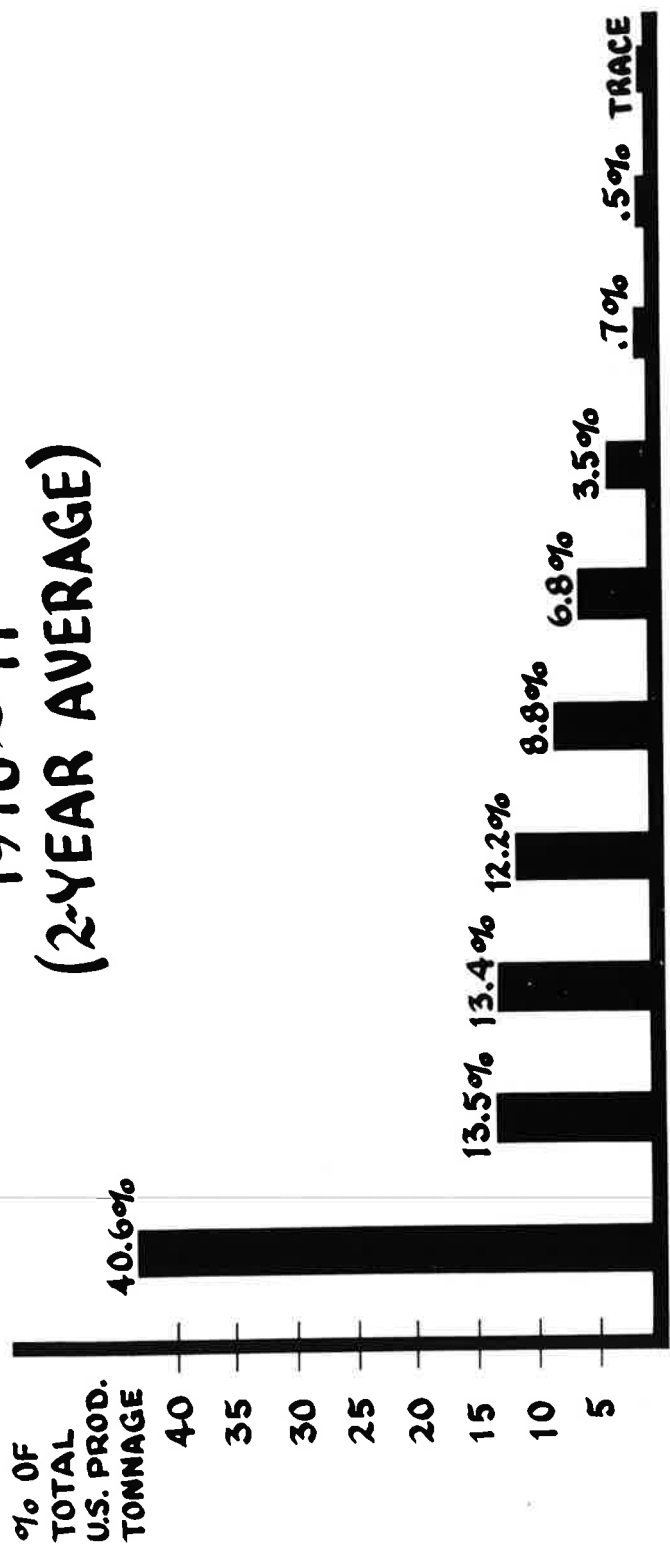
During and after the Civil War, commercial production increased rapidly. Exact statistical records for the period are not available, but the *Annual Report* of the USDA for 1868, gives a 4-page discussion of the crop. This estimates the Virginia crop for that year at 300,000 bushells, selling at \$2.75 a bushell (22 pounds). Two varieties are mentioned: the Virginia and the Carolina or African. At that time, most of the commercial crop was roasted in the shell and sold freshly roasted by street vendors.

An important development of the peanut industry was the invention and manufacture of machinery for planting, cultivating and harvesting the plant, picking the nuts from the plants, and for shelling and cleaning the seed. Without these labor-saving machines, peanut production would undoubtedly have declined with the gradual increase in cost of human labor. Just before the Civil War, a mechanic, Thomas L. Colville of Wilmington, North Carolina, invented a machine for threshing the nuts from the vines and winnowing them. H. E. Colton (14) credits Colville with building a machine for removing the shells. The threshing machine was assigned U. S. Patent No. 18,435, issued October 20, 1857. Many variations and improvements were tried before a really satisfactory picker was built about the beginning of the present century. Development of a successful planter, of the scraper plow, the weeder, and the peanut wing for cutting the roots in harvesting, are among the important inventions that materially reduced the labor of producing peanuts and led to vast expansion of the peanut industry during the present century. The mechanical sheller was an especially important factor in increasing the use of peanuts and peanut products such as peanut oil, roasted and salted nuts, peanut butter, peanut candy, and other confections.

Peanut butter did not achieve commercial status until the 1890's. The idea spread rapidly. Winton (15) in 1899, published analyses of two brands; and in 1914, Utt (16) analyzed and examined for adulterants 23 brands bought on the markets of Kansas City. At present, more than half the peanuts shelled for the edible trade go into the production of peanut butter.

According to the 1890 *Census Report*, some acreage of peanuts was grown in 34 states the previous year, and acreage was reported from practically every county in

FIGURE ~3
UNITED STATES PEANUT PRODUCTION BY STATES *
1970 ~ 71
(2-YEAR AVERAGE)



GA. TEXAS N.C. ALA. VA. OKLA. FLA. N.MEX. S.C. OTHERS

* PEANUT MARKET NEWS ~ NOVEMBER 1972

the Cotton Belt. In most of these states, plantings consisted of small plots for home use only.

Peanut production in the Virginia-Carolina area registered a dramatic increase during the ten-year period from 1889 to 1899. These two states reported a combined acreage of 77,000 acres in 1889; by 1899, it had increased to more than 200,000 acres (17).

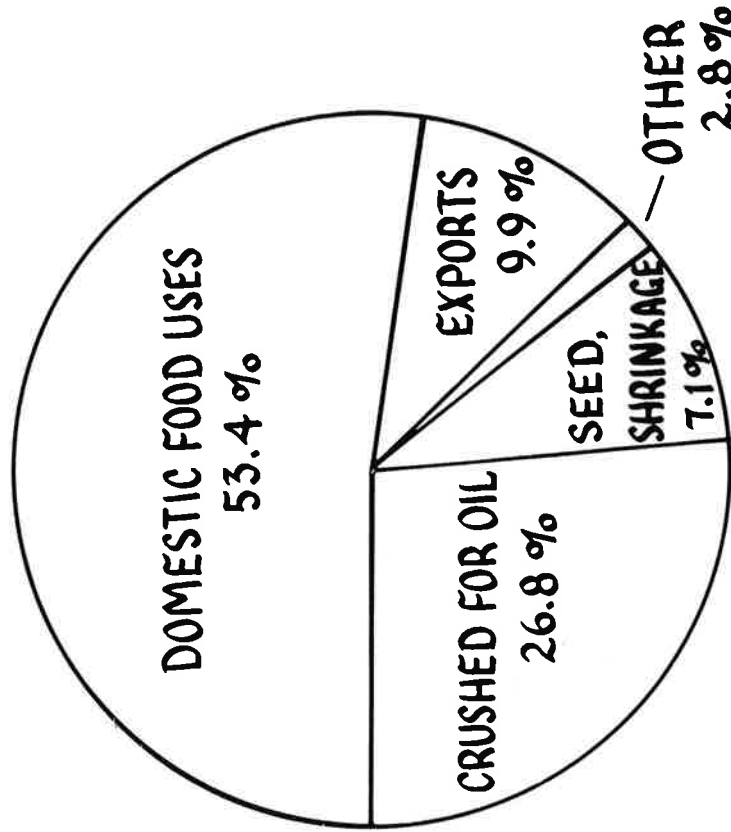
Although peanuts were grown in the Southeastern area during the Colonial period, they did not become a crop of commercial importance until about 1917. About 1905 the cotton boll weevil caused severe damage to this crop and growers increased their plantings of peanuts. By 1915, 153,000 acres of peanuts were planted in the Southeast. A limited number of peanut shelling plants were built in 1916 throughout this area. In 1917, the acreage of peanuts harvested in the Southeast increased to 516,000 acres. Since that time peanuts have occupied a place of permanent importance in the agricultural economy of the Southeast.

In the Southwest, the acreage of harvested peanuts more than doubled between 1916 and 1917. World War I and the need to expand the acreage of peanuts as a cash crop were important factors responsible for establishing peanuts as an important cash crop.

Government acreage controls on peanuts have been in effect since 1948 with the national minimum acreage allotment for peanuts set at 1,610,500 acres. With acreage controls, a price support schedule has been in effect with the Secretary of Agriculture setting peanut price support annually at some point between 75 and 90 percent of parity. Refer to Table 2 for the average price support for peanuts (all types) from 1961-1972. In 1968, United States peanut growers approved marketing quotas for the three-year period by a 96.9% majority of growers voting. When such quotas are in effect, growers complying with their allotments are eligible for the full level of available price support. Non-compliers are subject to marketing penalties equal to 75% of the price support level on excess peanuts.

Peanuts now rank in the top ten crops of the United States. The farm value of farmerstock peanuts in this country now exceeds \$350 million annually. Data in Figure 3 shows the distribution of peanut production by states. Seven states now account for about 98 percent of the total peanut tonnage produced in this country. Data in Table 3 gives distribution of the United States peanut allotment by states, size and distribution. In most states, the actual number of peanut growers would be considerably less than the number of peanut allotments, listed in Table 3, due to the practice of lease, sale and transfer of peanut allotments.

In order to facilitate marketing the peanut crop, three producing areas have been designated: The Virginia-Carolina area, including Virginia, North Carolina, and Tennessee; the Southeastern area, including South Carolina, Georgia, Florida, Alabama, and Mississippi; and the Southwestern area, including Louisiana, Arkansas, Texas, Oklahoma and New Mexico. The division into these three areas is based somewhat upon the geographic location and the commercial market type of peanut grown. The Virginia-Carolina area produces the large-seeded Virginia type peanut almost exclusively. In the Southeastern area, the Spanish, Runner and Virginia market types are grown, with Runner type occupying considerably more than 50% of the acreage in that area. In the Southwestern area, the commercial peanut crop is almost exclusively the Spanish type. The Valencia type accounts for the remainder with four-fifths of the United States Valencia's being grown in New Mexico. See Figure 2 for distribution of com-



**FIGURE 4 ~ UNITED STATES PEANUT SUPPLY & DISTRIBUTION of USES
1970**

SOURCE: USDA FOS-265, NOVEMBER 1972

mercial peanut market types produced in the United States. Refer to Figure 3 for the percentage distribution of commercial peanut production by states.

The Agricultural Adjustment Act of 1933 brought an era of government controls and a price support program for peanuts. However, during World War II, the abnormal demand for food by our own armed forces and those of our allies was such that these government controls became inoperative between 1943 and 1947. This increased demand with high prices caused enormous acreage expansion in most peanut producing areas. In the 1945 Census of Agriculture, some acreage of peanuts was planted in 32 states. Lack of machinery, especially pickers for handling the crop, and lack of marketing facilities prevented expansion outside the old historic producing areas.

The Spanish type is used widely in peanut butter, salted peanuts, and candy. Runners are used mainly for peanut butter. The Virginia type is used mainly for fancy salted peanuts and roasted in the shell. Even though the above listed uses are preferred, most market types are used interchangeably, depending upon price, quality and availability.

The per capita consumption of peanuts and peanut products in 1971 was 7.9 lbs. per year (Farmerstock basis — refer to Table 4). This compares with a per capita consumption in 1962 of only 6.9 pounds per person per year.

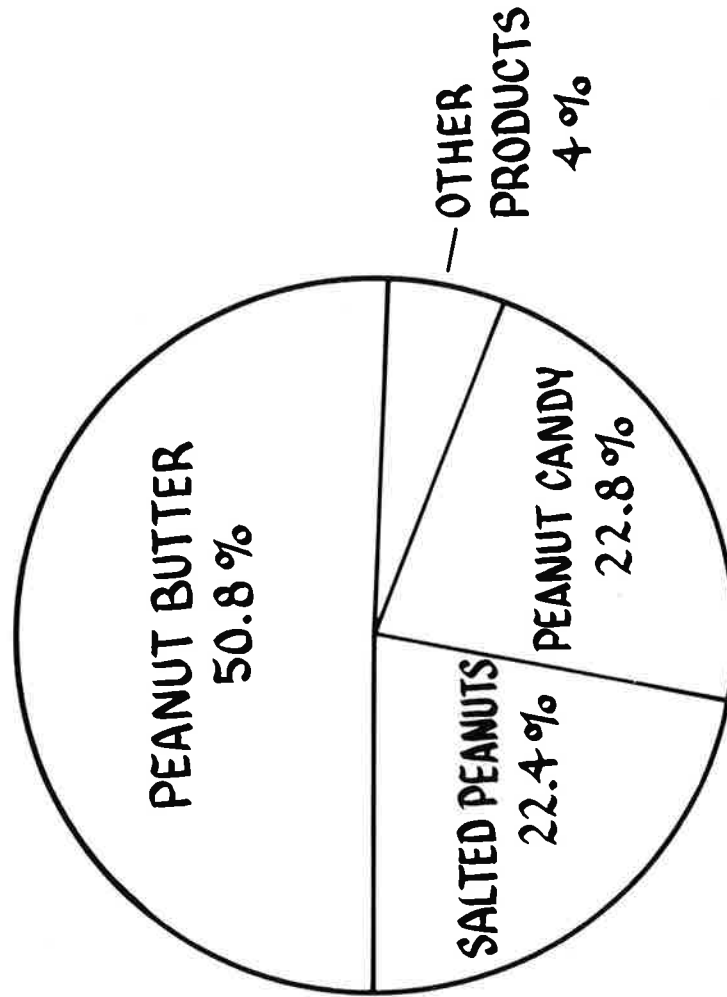
Most of the increase in United States consumption of peanuts during recent years has been through population increase. In recent years, an intensive advertising campaign has been conducted by growers and manufacturers stressing the food value of peanuts. This campaign doubtless has had and will continue to have a favorable influence on the increased consumption of peanuts.

The United States is one of the few countries of the world where peanuts are used extensively for domestic food uses. In 1970, more than 50% of the United States peanut supply was used for domestic edible purposes (See Figure 4). In that year 26.8% was crushed for oil and 9.9% of the United States production was exported. However, in the last 2 years, more than 10% of U.S. Production was exported.

Much money and effort have been expended upon development of new ways of introducing peanuts into the diet, utilizing the whole peanut or the defatted peanut, but few of these new use items have yet become important commercially. New product development and utilization research underway in recent years, however, is expected to add impetus to this much needed area of the United States peanut industry.

Peanut butter accounts for disappearance of more than 50 percent of our edible stock (See Figure 5). In 1947, nearly 325 million pounds were utilized in peanut butter. By 1969, more than 540 million pounds of peanuts were used in the manufacture of peanut butter. This was 51 percent of the shelled edible stock retained for domestic use. At present considerable research is being directed toward improving the quality of peanut butter and other domestic food uses, and there are indications that consumption will continue to increase.

Peanut producers, processors and end-users are working diligently to stimulate interest in the world-wide utilization of peanuts. Scientists on all continents are becoming increasingly aware that "the Peanut", which in the past has been relished by many forms of animal life and used mainly by man for oil, is now destined to make a greater contribution toward solving the nutritional deficiencies of mankind throughout the World.



**FIGURE 5 ~ UNITED STATES DOMESTIC USES OF EDIBLE PEANUTS
1970 ~ 71**

SOURCE: PEANUT STOCKS AND PROCESSING ~ MARCH 1972

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Table 1. Peanut Acreage in Specified Countries and the World

Sources of data: Foreign Agriculture Circular, USDA, FFO 8-70, August, 1970

| Continents and Countries | Average 1962-66 | | Average 1967-69 | | Average 1967-69 |
|--------------------------|------------------|--------------------|------------------|--------------------|--------------------|
| | Acreage Acres | Production Tons | Acreage Acres | Production Tons | Acre Yield lbs. |
| | 1,000 acres | 1,000 tons | 1,000 acres | 1,000 tons | |
| North America: | | | | | |
| United States | 1,409 | 1,055 | 1,429 | 1,257 | 1,759 |
| Mexico | 176 | 89 | 122 | 57 | 934 |
| Cuba | 36 | 17 | 37** | 19** | 1,030** |
| Dominican Republic | 126 | 54 | 138 | 61 | 884 |
| Other | 26 | 6 | 28 | 8 | 571 |
| Total | 1,773 | 1,221 | 1,755 | 1,400 | 1,595 |
| South America: | | | | | |
| Argentina | 792 | 425 | 707 | 313 | 885 |
| Brazil | 1,242 | 741 | 1,607 | 828 | 1,030 |
| Paraguay | 56 | 23 | 58 | 20 | 689 |
| Uruguay | 19 | 6 | 7 | 2 | 571 |
| Other | 48 | 22 | 59 | 28 | 949 |
| Total | 2,157 | 1,217 | 2,352 | 1,191 | 1,013 |
| Europe: | | | | | |
| Italy | 10 | 11 | 5 | 5 | 2,000 |
| Greece | 8 | 6 | 9** | 7** | 1,555** |
| Spain | 12 | 8 | 10 | 6 | 1,200 |
| Other | 5 | 2 | 7 | 5 | 1,428 |
| Total | 35 | 27 | 31 | 23 | 1,484 |
| Africa: | | | | | |
| Sudan | 868 | 312 | 862 | 302 | 701 |
| United Arab Republic | 56 | 51 | 43** | 28** | 1,302** |
| Angola | 113 | 36 | 104* | 35* | 673* |
| Cameroon | 369 | 141 | 432* | 163* | 754* |
| Central African Republic | 196 | 67 | 216** | 80** | 741** |
| Chad | 423 | 137 | 336** | 109** | 649** |
| Congo (Brazzaville) | 61 | 16 | 49* | 19* | 776* |
| Congo (Kinshasa) | 490 | 128 | 494* | 126* | 510* |
| Dahomey | 186 | 32 | 163* | 30* | 368* |
| Gambia | 361 | 108 | 452* | 132* | 584* |
| Ghana | 68 | 55 | 95* | 67* | 1,410* |
| Guinea | 72 | 21 | 67* | 20* | 597* |
| Ivory Coast | 127 | 31 | 97 | 34 | 701 |
| Malagasy Republic | 100 | 41 | 117** | 46** | 786** |
| Malawi | 550 | 181 | 890* | 218* | 490* |
| Mali | 387 | 176 | 43 | 124 | 5,767 |
| Mozambique | 92 | 81 | 59 | 127 | 4,305 |
| Niger | 801 | 259 | 974 | 296 | 607 |
| Nigeria | 3,000 | 1,675 | 2,883 | 1,493 | 1,036 |
| Portuguese Guinea | 222 | 71 | 222* | 72* | 649* |
| Rhodesia | 415 | 132 | 420 | 86 | 410 |
| Senegal | 2,635 | 1,080 | 2,267 | 962 | 813 |
| Tanzania | 109 | 23 | 74* | 12* | 324* |
| Uganda | 627 | 192 | 694 | 220 | 634 |

*1967 only.

**1967 and 1968 only.

PEANUTS — CULTURE & USES

Table 1. (Continued)

| Continents and Countries | Average 1962-66 | | Average 1967-69 | | Average 1967-69 |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Acreage Acres | Production Tons | Acreage Acres | Production Tons | Acre Yield lbs. |
| | 1,000 acres | 1,000 tons | 1,000 acres | 1,000 tons | |
| <i>Africa (Continued)</i> | | | | | |
| Upper Volta | 623 | 141 | 400* | 104* | 520* |
| Zambia | 81 | 75 | 85 | 72 | 1,694 |
| South Africa | 716 | 229 | 799 | 369 | 924 |
| Other | 301 | 91 | 374 | 124 | 663 |
| Total | 14,049 | 5,582 | 14,269 | 5,487 | 769 |
| <i>Asia:</i> | | | | | |
| Israel | 9 | 13 | 7 | 12 | 3,429 |
| Turkey | 25 | 28 | 32 | 35 | 2,187 |
| <i>China:</i> | | | | | |
| Mainland | 4,480 | 2,310 | 4,832 | 2,590 | 1,072 |
| Taiwan | 245 | 120 | 235 | 126 | 1,072 |
| Burma | 1,361 | 369 | 1,460 | 452 | 619 |
| India | 17,602 | 5,416 | 18,005 | 5,697 | 633 |
| Indonesia | 916 | 408 | 1,020 | 430 | 843 |
| Japan | 158 | 153 | 147 | 141 | 1,918 |
| Pakistan | 77 | 45 | 191 | 129 | 1,350 |
| Philippines | 56 | 14 | 71 | 16 | 451 |
| Thailand | 248 | 153 | 258 | 171 | 1,325 |
| Other | 242 | 115 | 241 | 133 | 1,104 |
| Total | 25,419 | 9,144 | 26,498 | 9,932 | 750 |
| <i>Oceania:</i> | | | | | |
| Australia | 44 | 21 | 65 | 33 | 1,015 |
| World Total | 43,477 | 17,212 | 44,970 | 18,066 | 803 |

*1967 only.

Table 2. United States Peanut Price Support and Parity Index (1961-70)

| Crop Year | Percent of Aug. parity | \$/Ton U. S. Average |
|-----------|------------------------|----------------------|
| 1961 | 85.6 | 221.00 |
| 1962 | 82.0 | 221.40 |
| 1963 | 80.0 | 224.00 |
| 1964 | 79.4 | 224.00 |
| 1965 | 77.2 | 224.00 |
| 1966 | 76.7 | 227.00 |
| 1967 | 75.2 | 227.00 |
| 1968 | 77.5 | 240.25 |
| 1969 | 76.0 | 247.50 |
| 1970 | 75.0 | 255.00 |
| 1971 | 75.0 | 268.50 |
| 1972 | 75.0 | 285.00 |

Source: FOREIGN AGRICULTURE CIRCULAR — FFO 8-70 — August, 1970.

Table 3. United States Peanut Allotment by States, Size and Distribution*

| State | Farms with Peanut Allotments | No. Farms with 7.5+ Acre Allotments | No. Acres Peanuts on Farms with 7.5+ Acres | Total Acreage Allotment |
|-------|------------------------------|-------------------------------------|--|-------------------------|
| Va. | 6,643 | 3,938 | 93,959 | 105,103 |
| N. C. | 15,241 | 4,712 | 132,566 | 168,269 |
| S. C. | 886 | 291 | 11,608 | 13,871 |
| Ga. | 26,302 | 13,592 | 481,093 | 528,259 |
| Ala. | 14,218 | 6,503 | 188,276 | 216,778 |
| Fla. | 4,945 | 1,940 | 43,627 | 55,329 |
| Texas | 12,428 | 8,372 | 341,690 | 357,103 |
| Okla. | 7,645 | 4,372 | 124,761 | 138,574 |

*THE PEANUT FARMER — February, 1969.

Table 4. United States Civilian Per Capita Consumption of Peanuts*
(Farmers' Stock Basis — 1960-69)

| Year | Per Capita Consumption — lbs. |
|-------------------|-------------------------------|
| 1960 | 6.9 |
| 1961 | 6.9 |
| 1962 | 6.9 |
| 1963 | 7.1 |
| 1964 | 7.4 |
| 1965 | 7.4 |
| 1966 | 7.3 |
| 1967 | 7.6 |
| 1968 | 7.7 |
| 1970 | 7.8 |
| 1971 ¹ | 7.9 |

¹Preliminary.

*FOREIGN AGRIC. CIRCULAR — August, 1970.

