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The Peanut Industry in India

1964-75 and projections for 1980

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UNITED STATES DEPARTMENT OF AGRICULTURE

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THE PEANUT INDUSTRY IN INDIA, 1964-75 AND PROJECTIONS FOR 1980

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> > iv

Summary

India is the world's foremost producer of peanuts, accounting for more than 30 percent of the world's crop annually. The second largest producer is the People's Republic of China (PRC), producing annually less than half of the Indian crop. In 1973/74, India's estimated production was 35 percent of the 17 million tons produced in the world. The 1973/74 production of peanuts in India was estimated at 5.8 million metric tons, unshelled, considerably above the level of the 1972/73 crop but lower than the levels of the two previous crops.

Weather conditions were quite favorable for last year's crop as the monsoons came when moisture was needed; as a result, planting proceeded in an orderly manner and cultivation and harvesting were on schedule. The monsoons began late in 1974/75 and showed an erratic pattern so that planting in many cases was late. In other areas, replanting was necessary. Later, in some areas the monsoons normalized and adequate moisture was available.

In the Southern States, some peanuts are grown under irrigation. Any increase in these States still will not offset production declines in the major producing areas. However, latest estimates are that production did not exceed 5 million tons in 1974/75, which is 14 percent below the 1973/74 production level.

Over the short run, it is likely that Indian peanut production will not increase substantially, and that there will be a growing deficit of peanut oil for internal consumption as well as peanut meal for exports. There are solutions-such as increased soybean and sunflower production—to counter the short vegetable oil supply situation, but for increases in peanut production there has been no real breakthrough in new varieties or improved cultural practices for some time. Since up to 95 percent of the area now sown to peanuts depends on the monsoons for moisture, it is not likely that any breakthrough in increased production will occur until there is more sustained research and a variety or varieties are developed more resistant to lack of moisture than those now in use. These varieties must then be made available to farmers through the extension services.

India's oilseed production through 1979/80, especially for peanuts, needs to develop significantly to take care of the vegetable oil requirements of the fastgrowing population. The production target set under the Fifth Development Plan calls for an increase in production to 7.65 million tons by 1979. Such a level is desirable, but at the present production growth rate, it appears that a level of only 6.5 million tons will be reached unless weather conditions are extremely favorable during the next 5 years.

The growth rate in area for commercial crops in India was 0.4 percent from 1960/61 to 1971/72. During this period, peanut acreage showed no increase and yield did not improve. It does not seem reasonable, therefore, to expect any marked increase in area and yield by 1979. However, if additional areas are irrigated, then more than likely these areas will show substantial increases in yields. The Fifth Development Plan proposes that an additional 100,000 acres of peanuts be irrigated. This, of course, is less than 1 percent of the total area under peanuts and will not alter production significantly.

Production

Production of peanuts in India is a private endeavor with no Government programs or objectives that delineate production either for the medium or long term. During the past 11 years production has ranged from a low of 4.1 million tons in 1972/73 to a high of 6.2 million tons the year before. The 4.1 million tons produced in 1972/73 was a decline of 33.8 percent from the level of the previous year. Area planted to peanuts in 1971 was also at an alltime high of 18.6 million acres. Each year approximately the same area is planted, but owing to weather problems, the harvested area varies greatly.

The major factor that influences planting and production is the unreliable monsoon. If these rains are favorable—adequate amounts at the right time—then the crop will be large. However, if rainfall is inadequate or does not fall at the right time, then production will be low. As a result, yields have varied considerably—506 to 749 pounds per acre during the period under consideration. If more land is put under irrigation as called for in the Fifth Development Plan, yields should improve. The 1979 crop is now forecast to yield an average of 772 pounds per acre.

Year 1 Area Production Yield per acre 1,000 metric 1,000 metric 1,000 metric 1964 17,832 5,888 0.33 1965 18,355 4,321 0,23

	1,000 acres	tons	Metric tons
1964	17,832	5,888	0.33
1965	18,355	4,321	0.23
1966	18,036	4,411	0.24
1967	18,663	5,731	0.31
1968	17,513	4,631	0.26
1969	17,606	5,130	0.29
1970	18,103	6,111	0.34
1971	18,558	6,181	0.33
1972	17,265	4,091	0.24
1973	17,043	5,798	0.34
1974	17,900	5,000	0.28
1979	18,500	6,500	0.35

¹ Harvested the following year.

Table 1.—INDIA: AREA, PRODUCTION, AND YIELD OF PEANUTS, 1964-74 AND PROJECTIONS FOR 1979

Size of farms, as well as area planted to peanuts on each farm, varies greatly from region to region. In the northern producing States of Gujarat and Maharashtra, farms are generally 30 acres or less and peanuts planted on each farm would account for only 5 acres or less. In the States of Andhra Pradesh and Tamil Nadu, farms are somewhat larger and some are irrigated. About 80 percent of India's total peanut crop comes from farms of 5 acres or less. Usually, the farmer owns his own land, but sharecropping and renting is also practiced.

Weather conditions during the 1973/74 season were fair to good throughout all the producing regions; as a result, the outturn of 5.8 million tons was realized. In 1974/75, particularly in the Northern States, the monsoons did not provide enough moisture and the entire crop is about 14 percent below the level of the previous year. In areas where the peanut crop was lost because of insufficient moisture, and the time was too short for replanting, millet was substituted.

Cultivation practices are uniformly fair, but fertilizer, insecticides, and herbicides are used only by about 8 percent of all farmers. Extension work is carried out by the States and universities but the pace should be stepped up if benefits are to reach all farmers who have to produce more in order to keep up with the evermounting population.

Marketing

As with production, marketing of the peanut crop in India is unregulated. Indian farmers usually take their crop to a nearby village where merchants assemble the nuts in lots for transport to larger villages within a radius of 10 to 15 miles. The village merchants are itinerant dealers and usually purchase for wholesale merchants.

Merchants or middlemen then take the lots of nuts to one of the 124 major regional markets in the peanut producing areas, where they are purchased and taken to crushers or exporters. All peanuts, both bunch and runner varieties, are purchased either shelled or unshelled on a volume basis and not by grades. Grading or sizing is done at the plant or main assembly points where abundant labor is available for sorting, usually by the sieve method. The most popular sizes are 65 to 70 and 55 to 60.

Domestic prices of peanuts and oil are normally above world prices but do vary in different areas, depending upon the different varieties. Fluctuating world prices do not usually affect domestic markets and prices to farmers.

Associations and Cooperatives

Approximately 80 percent of all peanuts in India are marketed through normal marketing channels, but some 20 percent are handled, sold, and processed by farm groups called unions and cooperatives.

Cooperatives function as selling agents for the unions, and may handle the farmer's total production, giving up to 75 percent of the current market value upon delivery with the final settlement after the nuts are sold. The cooperative may also buy the nuts and process them into oil or vanaspati (hydrogenated shortening).

At a nominal charge of 75 rupees per ton, the cooperative will crush the oil from the nuts. Then he may sell the oil or the cooperative can be impowered to sell both the oil and meal for the producer.

Unions and cooperatives are strong in some areas of India, but generally farmers prefer to sell to village markets or to commissioned agents; however, many small oil processing plants—probably over 2,000, both solvent and expeller, with trucks and bullock carts often make purchases directly from farmers.

Agricultural credit is available to the farmer through the cooperative banks and private hands. However, some areas do not have adequate credit. Cooperative banks usually supply credit to farmers' unions, which are an integral part of the cooperative at the marketing level.

Unions derive some operational capital from the half-percent interest over cost received from loans to its members. In addition, unions receive money from the Central Banks at 7 percent and lend money to farmers at 7.5 percent. Based upon historical averages, unions will lend farmers up to 75 percent of production costs for the coming year.

Commercial Movements

Since peanuts provide the largest share of vegetable oils consumed in India, this crop is the focus of most attention. According to crushers, of the total 1973/74 production of 5.8 million tons (4.1 million shelled basis), 420,000 were used for seed and losses and the remaining 3.8 million for domestic consumption-0.55 million as nuts and 3.25 million for crushing (oil and meal).

Traders at the consumer and export levels are very sophisticated and keep abreast of national and international events that affect oilseeds and products, and central and State governments are in constant contact with major oilseed exchanges.

No minimum prices, Government controls, or exchange restrictions normally are imposed for marketing peanuts by farmers, middlemen, processors, or traders. On occasion, however, local or State governments may impose indirect controls that slow or completely stop trade by imposing standards that most find difficult to meet or by requiring permits from State authorities to move the product. These permits are usually delayed or not granted if the internal demand is appraised as criti¹ cal.

Exports

Peanut exports in 1972 totaled 34,600 tons and reached 43,900 tons in 1973. By 1974 they rose to about 122,000 tons (unshelled basis), the largest tonnage ever exported from Indian ports.

Table 2.—EXPORTS OF UNSHELLED PEANUTS AND MEAL, 1964-74, WITH FORECAST FOR 1975 AND PROJECTION FOR 1980

(In metric tons)

Year	Peanuts	Meal
1964	42,215	N.A.
1965	2,650	465,069
1966	259	602,421
1967	391	525,166
1968	28,953	649,388
1969	68,853	526,858
1970	36,897	655,060
1971	39,286	633,413
1972	34,599	670,529
1973	42,900	835,000
1974 (estimated)	122,000	708,000
1975 (forecast)	70,000	650,000
1980 (projection)	80,000	750,000

Source: Oils and Products Journal of Bombay, 1975.

Exports of peanut oil are currently prohibited. Meal exports are usually about 40 percent of total production. Approximately 560,000 tons of nuts as nuts were available in the 1973/74 season for consumption and exports. The ratio of shelled to unshelled nuts is usually 0.7 to 1.0.

While exports were encouraged up through the end of 1974 because world prices were high and foreign exchange was needed, no plans by State or central governments have been formulated for increasing exports. Rates continue to be standard and exports are not subsidized. Exporters' associations have stated that shipments in 1975 more than likely will return to the 1973 level.

In a normal year, export of peanuts is mainly to countries with which India has bilateral agreements (East European countries and the USSR). In 1974, however, traders believe that because Nigeria exported little or no nuts to Europe, India, as well as the United States, obtained some of Nigeria's markets. Indians believe that although these peanuts were exported as edible quality, the high price of peanut oil caused diversion of a high percentage of nuts to mills for crushing. Generally, no problems arose in exporting peanuts from India in 1974, but the world shortage of shipping space in 1973 caused some delays in movements of both peanuts and meal to foreign markets. Since most exporters ship only 200 to 500 tons of Hand Picked Selected (HPS) to different markets, peanuts occasionally are held in storage if transportation is not available. The Association of Exporters has moved to combine orders going to the same country, thereby reducing the number of shipments. This joint shipping program began in 1973 and appears to be functioning very well.

For many years now products going to Europe have had to go by way of Africa, instead of the Suez Canal. As a result some shipments have arrived at markets with a higher percentage of spoiled kernels than is permitted. Most shippers claim that there are no aflatoxin problems because all shipments test within acceptable levels, and the Superintendence Company checks all shipments before loading. Now that the Canal is reopening, some of the spoilage due to shipping time may be eliminated.

Research

Most of the State universities in major peanutproducing areas, as well as some central experimental stations called dry land stations—are doing basic research on peanuts to develop varieties most suitable to the specific area. Varieties developed as a result of this research are used at other universities so that testing is widespread. In this manner, there is sufficient basic material to continue research and development of higher yielding, more resistant strains.

The major problem is to find a variety that can grow with a minimum amount of moisture since the crop is almost completely dependent on the monsoon rains. If there is little or no rain, yield falls from 0.34 ton per acre to 0.23 ton per acre or less.

In 1968 the University of Punjab did an excellent study on marketing and production of peanuts with meaningful findings, but most of the information has not reached farmers and major markets where the results of the study could be put into practice.

The Extension services are functioning and endeavoring to get available information to farmers, but are hindered by many problems: Natural farmer resistance to change, limited resources, and lack of adequate communications.

In spite of the Punjab study and other advances, significant production gains within the next 5 years are doubtful and future peanut oil supplies are of great concern. Unless production of vegetable oil-bearing materials is increased considerably during this time, India will have to import significant quantities of oil to meet the needs of its growing population. UNITED STATES DEPARTMENT OF AGRICULTURE WASHINGTON, D. C. 20250

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The likelihood of successfully increasing oil production for India's consumption needs appears to rest mainly with the various areas of concentration identified in the Government's Fifth Development Plan: (1) Development of oilseed production technology for rain-grown areas; (2) evolution of drought-resistant varieties; (3) fixation of mode and time of fertilizer application; and (4) problems on micro-nutrients deficiency in oilseed crops.

The Vanaspati Manufactures Association (VMA) of India, a private group that manufactures dehydrogenated shortening, has a basic research program employing three agronomists working in conjunction with State governments to improve, list, and distribute improved seed.

The accompanying map gives the areas and the varieties that are being developed by the VMA and State governments to help improve yield and hence increase production.

Situation and Outlook

The world's largest producer of peanuts—India—is not historically the largest exporter of nuts. Some of India's exports of nuts have been Hand Picked Selected and some have been for crushing. In the past 11 years, total exports of nuts only twice exceeded 50,000 tons—in 1974, when Nigeria exported almost no nuts, and in 1968 when India's total exports reached 68,000 tons. Because of India's dependence on peanuts (both as a food and for oil) it is not likely that it will become a major competitor on world markets for HPS or peanuts for crushing. This assessment, of course, precludes a Government policy decision that exports should be given preference over domestic needs in order to earn foreign exchange. In 1974/75, exports are not expected to exceed 70,000 tons. If production climbs to 6.5 million tons in 1975/75, then exports will probably be about 80,000 tons.

India appears to have no set pattern regarding consumption. If the crop is low, then internal consumption is low, but the consumption pattern is also uncertain. Crushers appear to suffer more from a low crop than other sectors, and at times the amounts attributed to seed and losses are excessively high. As in many consuming countries, a large quantity of nuts never leaves the farm and is consumed locally. After the farmers take out what is required for seed and family uses, the rest is sold. This quantity will vary from year to year based on the availability of other food and oil crops.