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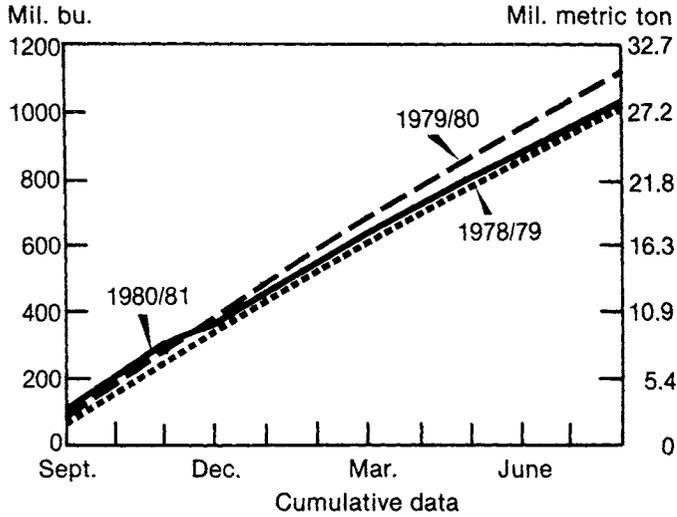
# Fats and Oils

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# OUTLOOK & SITUATION

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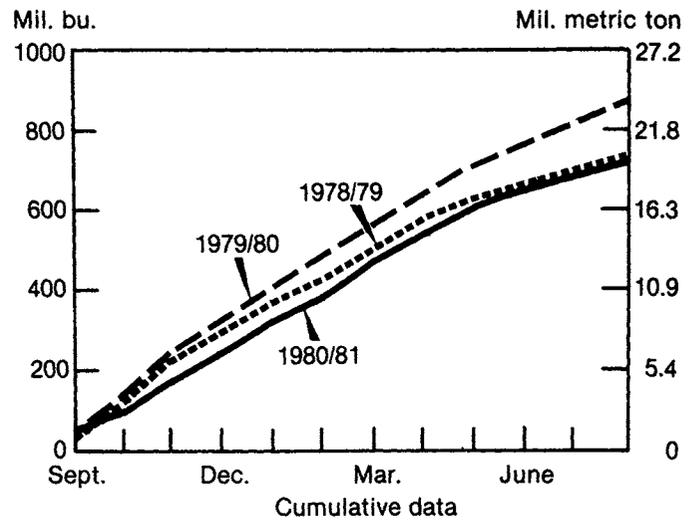
### Monthly U.S. Soybean Crushings



USDA

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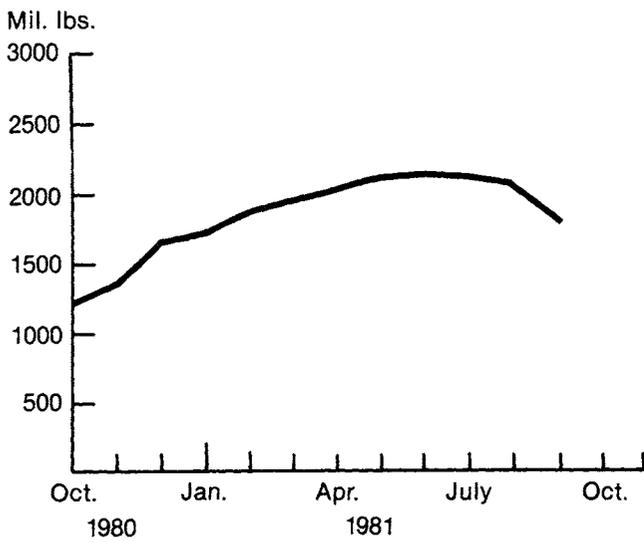
### Monthly U.S. Soybean Exports



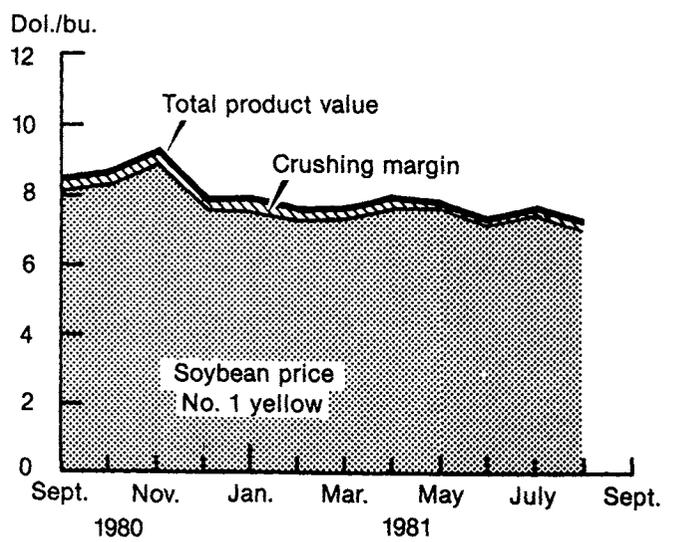
USDA

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### Monthly Soybean Oil Stocks



### Product Value vs. Soybean Price



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## Summary

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World oilseed production is projected at nearly 175 million metric tons this year, almost 15 million above last year's depressed output. The bulk of the expansion will occur in the United States, where the soybean, cottonseed, sunflowerseed, and peanut crops are expected to increase sharply.

While U.S. soybean supplies will rebound from last season's drought-reduced level, the use of soybeans and products may gain only moderately. This supply/demand situation will push prices down throughout the soy complex, and soybean and soybean oil stocks are projected to build.

U.S. soybean production will likely jump 18 percent to 2.1 billion bushels. Record and near-record yields in several key producing States will negate a 2-million-acre drop in planted acreage. Larger production and a hefty carryin of 320 million bushels will boost total supplies to 2.4 billion, only 1 percent below the 1979/80 record.

As indications of a bumper crop rolled in, soybean prices at the farm took a dive, dropping from \$7.42 a bushel in May to \$6.29 in mid-September. Without significant changes in demand, prices are apt to stay low during October-December, the heavy harvest period. The season-average price is expected to fall within \$5.50 to \$7.00 a bushel.

Even though soybean supplies have expanded 13 percent, and prices have dropped substantially, total disappearance is projected to reach 2 billion bushels, an

increase of 10 percent over the previous season, but 4 percent below the 1979/80 record demand. Prospects for improved crushing margins, resulting from relatively weak bean prices, will help bolster crushing demand. Crushing is expected to rise 60 million bushels to 1.08 billion. Exports could reach 840 million bushels, up over 100 million bushels. A marked slowdown in oilseed supplies in other exporting countries and a modest expansion in consumption in importing countries are contributing to improved U.S. export prospects. Despite these increases, U.S. ending stocks are forecast at a record 420 million bushels.

Because of improved feeding margins and a more favorable soybean meal/corn price ratio, domestic demand for soybean meal should improve. Also, U.S. meal exports for the season may register a 6-percent gain, because crop and livestock conditions in the USSR and Eastern Europe still suggest expanding imports at a time when Brazilian supplies are not expected to increase.

Burdensome supplies and low prices will continue to plague the 1981/82 soybean oil market. The season-average price is projected between 20 and 24 cents a pound. Despite low prices, domestic disappearance and exports may not keep pace with rising supplies, so stocks could grow slightly.

A 20-percent increase in sunflowerseed production will likely further expand a growing crushing industry. About 900,000 metric tons of seed are expected to be crushed

this year, placing forecasts of oil and meal production at 360,000 and 540,000 metric tons, respectively. Expanding sunflower oil exports will fuel increased domestic crush. Meanwhile, sunflowerseed exports could drop 1.4 million metric tons.

Cottonseed production will likely jump to almost 6.2 million short tons following a projected increase in the cotton crop and a return to a more normal lint-to-seed ratio of .45 ton of seed an acre. Although crushings should rise, limitations on crushing capacity in the West will temper the expansion. Therefore, much of the production increase will wind up as stocks.

The U.S. peanut crop is forecast at 3.87 billion pounds, farmers' stock basis—a sharp recovery from the drought-

reduced crop last season and just 2 percent under the 1979/80 record. The 1981 Senate version of the farm bill included major changes in the peanut program. Acreage allotments were eliminated, and the marketing quota was lowered to 1.24 million tons. The support price was set at \$596 a ton for 1982-quota peanuts. On October 15 the House adopted an amendment that would end allotments and the poundage control program and would allow the Secretary of Agriculture to set price supports. The differences between the Senate and House versions will be resolved by a conference committee.

# Fats and Oils Situation

## 1981/82 OILSEEDS AND PRODUCTS OUTLOOK AND SITUATION

### Soybeans

Despite a 2 million decrease in planted acreage, record and near-record yields in key producing States will boost 1981/82 soybean production to 2.1 billion bushels, making it the second largest crop on record. Combined with a hefty carryover of 320 million, total supplies will reach 2.4 billion, up 13 percent.

Even with the substantial jump in supplies and a corresponding price decline, several demand factors—such as high U.S. interest rates, a strong dollar, and a sluggish U.S. and world economy—will combine to temper gains in use. Total use, increasing to around 2 billion bushels, will not match rising production. As a result, carryover next September 1 is currently forecast to reach a record 420 million bushels. The market response to this situation is one of weaker prices compared with last year.

Soybean prices at the farm are heading for an average somewhere between \$5.50 and \$7.00 a bushel for the season, substantially below the \$7.61 of the 1980/81. Barring any significant changes in demand, prices during

the heavy harvest period (October-December) are expected to be the lowest for the crop year. During this period, prices will be influenced by farmers' willingness to hold beans, a decision that reflects a myriad of conditions, including the cost and availability of storage, interest rates and returns on alternative investments, cash flow situations for individual farmers, and the emerging price outlook. Prices will also be responsive to changes in production prospects in the Southern Hemisphere, where the planting season began in October.

### Crushings to Rise Modestly

Ample soybean supplies and low bean prices will improve crushing margins, providing crushers with an incentive to up the crush. Last season's narrow average margin of about 21 cents a bushel resulted in the industry operating at only around 75 percent of capacity—below the long-term average rate of 80 percent. This year's crush estimate of 1.08 billion bushels, if realized, would result in a utilization of capacity nearer the long-term average.

### Recovery In Exports Foreseen

Soybean exports are projected to reach 840 million bushels, up about 16-percent from the 724 shipped last season. Several factors point to this recovery. Considerably lower bean prices coupled with somewhat stronger product demand should stimulate additional imports. In the European Community (EC), soybean imports could rise 6 percent to 11.6 million metric tons, as crushing margins improve and lower meal prices swing the soybean meal/corn price ratio down. A drop in interest rates and a decline in dollar strength will accentuate an up-swing, particularly in this market. Based on expectations of shipments of 500,000 metric tons each from Brazil and Argentina, Soviet soybean imports are projected at 1.5 million metric tons. This forecast was recently realized by the announcement of U.S. sales of 500,000 metric tons of soybeans to the Soviet Union. These imports will help the Soviets augment short supplies of feedstuffs resulting from a production shortfall of coarse grains and oilseeds in that country. In addition to expanding import requirements in these locations, the United States will experience less competition from producers in the Southern Hemisphere, at least during the first half of the U.S. marketing year. How well U.S. exports perform during the second half of the season will largely be determined by the size of the South American crop that is now being planted, and Brazilian trade policy.

**Table 1—Soybean stocks: On farms, off farm  
and total in all positions**

Date	On farm	Off farm	Total
	<i>1,000 bushels</i>		
1977			
January 1	473,405	559,045	1,032,450
April 1	227,794	390,214	618,008
June 1	92,400	243,335	335,735
September 1	32,756	70,168	102,924
1978			
January 1	674,550	652,400	1,326,950
April 1	394,405	455,448	849,853
June 1	207,541	298,815	506,356
September 1	59,132	102,044	161,176
1979			
January 1	699,556	692,534	1,392,090
April 1	412,570	467,646	880,216
June 1	241,255	284,850	526,105
September 1	61,509	112,579	174,088
1980			
January 1	892,934	877,896	1,770,830
April 1	602,779	580,322	1,183,101
June 1	396,650	378,152	774,802
September 1	128,888	229,880	358,768
1981			
January 1	738,845	790,300	1,529,145
April 1	539,245	496,619	1,035,864
June 1	366,475	317,156	683,631
September 1	160,759	159,276	320,035

Crop Reporting Board, SRS.

## Soybean Meal

U.S. soybean meal production during 1981/82, is expected to expand almost 6 percent in response to both stronger domestic and export demand. Domestic soybean meal use is forecast to increase to almost 18.4 million short tons, up about 6 percent. This increase is based on expectations of higher feeding rates and animal unit and a more favorable soybean meal to corn price ratio.

Larger soybean output and a bumper corn crop will translate into lower feed costs and improved feeding margins for livestock producers, providing them with incentive to upgrade their rations, and/or increase feeding, or expand production. Broiler production is likely to rise by 3 percent in the first half of 1982, while beef output will be essentially unchanged. Pork producers have already reacted to the lower feed prices by indicating a slowdown in the decline of pork production. As of September, producers reported they intend to have only 6 percent fewer sows farrow during September-November, instead of earlier indications of an 11-percent decline. Coupled with intentions of only a 1-percent drop in farrowings for December-February, overall intentions point to higher pork production in the the first half of 1982 than was previously anticipated. Early season forecasts now show total red meat and poultry production essentially unchanged from last year.

Prices for both soybean meal and corn will be substantially lower this year, with season-average prices currently forecast at about \$180 a ton and \$2.75 a bushel, respectively. This price relationship favors increased use of soybean meal in feed rations. However, the aggregate advantage may not be as large as would be indicated by the average ratio because of regional variations. First, many of the major hog-producing operations are located in the Corn Belt, where expectations of a near-record corn crop have resulted in a mid-September farm price of \$2.50 a bushel. With soybean meal currently selling at about \$180.00 a ton, the ratio favors corn feeding as opposed to meal in these areas. Secondly,

because many of these hog operations also produce corn, they will be more inclined to feed corn rather than meal, because meal is an "out of the pocket" cost. Although these two factors are likely to retard expansion of soybean meal use, more normal winter weather could result in additional meal use during the first 3 month of 1982.

Beginning in November, competition from Brazil in the export market will be considerably less than last year. Exportable supplies of meal will be down because of aggressive March-October exports. Dwindling supplies in that country should allow for a significant recovery in U.S. exports, which are expected to rise 6 percent to slightly over 7.3 million short tons. A major upswing in imports is forecast to occur in the USSR, where substantial imports will be required to augment a poor Soviet harvest of oilseeds and coarse grains occurring at a time of record inventories of cattle and poultry and near-record inventories of hogs. Meal imports could also rise in Eastern Europe, Venezuela, and the EC.

## Soybean Oil

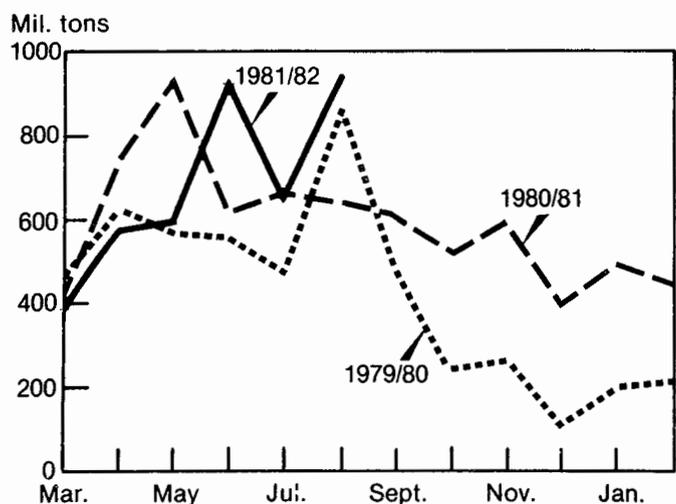
The 1981/82 marketing year for soybean oil will begin with a record carryin of 1.7 billion pounds, a figure that represents almost 2 months use based on last seasons' use. Increased domestic demand for meal and improved crushing margins will stimulate the U.S. crush, resulting in a 5-percent increase in production of soybean oil. The record carryin coupled with a production increase will lead to record soybean oil supplies of almost 13.5 billion pounds.

Demand prospects this season, though improved, are not likely to push use to levels that will keep pace with rising supplies. Consequently, stocks are likely to continue to build, reaching 1.8 billion pounds by the end of the marketing year.

Early season forecasts point to increases in both domestic disappearance and exports. The domestic market accounts for the bulk of total use, averaging over three-fourths of the total in recent years. The vast majority is funneled into the edible oils market, where it is used in the manufacture of baking and frying fats, salad and cooking oils, and margarine. Within recent years, the end-product markets have been experiencing about a 3-percent growth rate, roughly in line with increases in income and population. The quantities of soybean oil consumed in the manufacture of these products is a function of product growth; the oil mixtures required to yield desirable chemical properties; and the price of soybean oil relative to competing oils, such as peanut, cottonseed, and corn (produced domestically) and palm and coconut (imported). This year, low soybean oil prices relative to competing oils should stimulate an increasing share in product markets and a 4-percent rise in domestic soybean oil disappearance.

U.S. exports of soybean oil are projected to rise to 2.25 billion pounds, 41 percent above the 1980/81 shortfall. Brazil, the major foreign competitor in the soybean oil market, has been aggressively exporting oil since their harvest in March, in contrast with the preceeding season when marketings were distributed more evenly

### Monthly Brazilian Soybean Meal Exports

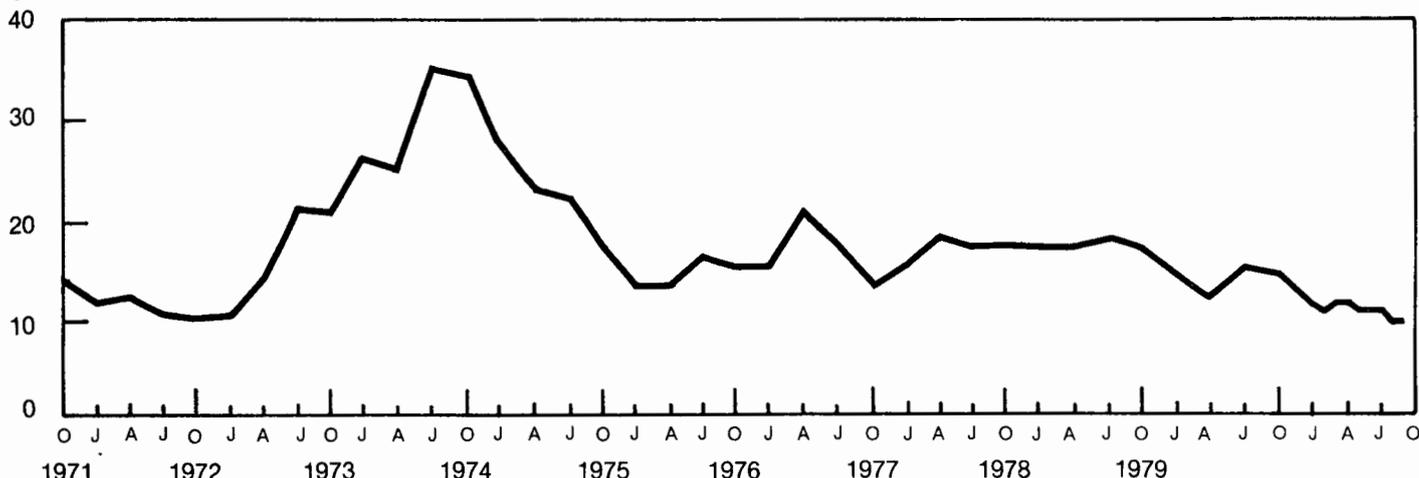


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## U.S. Soybean Oil Price, Constant 1972 Dollars<sup>1</sup>

Ct./lb.



<sup>1</sup>Soybean oil, crude, F.O.B. Decatur.

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throughout the year. The major buyers of Brazilian soybean oil have been India, and Iran. With large quantities of oil already exported and much of the remaining exportable supplies committed, the United States will be a principal world supplier until April 1982. During this period, the United States is expected to recapture at least some of the Indian market lost to Brazil last season. In addition, U.S. soybean oil prices are projected to be low relative to other oils, and this factor should stimulate additional use worldwide.

## Cottonseed

U.S. production of cottonseed in 1981/82 is projected to reach a record 6.2 million short tons because of an increase in the cotton crop and a return to a more normal lint-to-seed ratio. In spite of a very small carryin—

only .4 million short tons—total supplies will be a record-large 6.6 million.

Prices received by farmers for cottonseed during August-September averaged \$105.5 a ton, \$10.00 below the average for the same 2 months in 1980. Because of the record supply situation, the season-average price received by farmers is forecast to drop 12 percent to \$110.00 a short ton.

Limited capacity in the southwest is expected to restrict crushing to 4.3 million short tons. A crush of this magnitude will produce almost 1.4 billion pounds of oil and just under 2 million short tons of meal.

Cottonseed oil supplies in 1981/82 are estimated at about 1.5 billion pounds, 7 percent above last year's 1.4 billion. Domestic disappearance of oil is likely to increase only slightly because of stiff competition from other domestic oils, such as soybean and sunflower, which are also in ample supply. Vegetable oils compete as ingredients in the manufacture of shortening, salad and cooking oils, and margarine.

Over half of the cottonseed oil supplies this season will be exported. As in recent years, principle buyers are expected to be Egypt, and Venezuela—markets where cottonseed is a preferred oil.

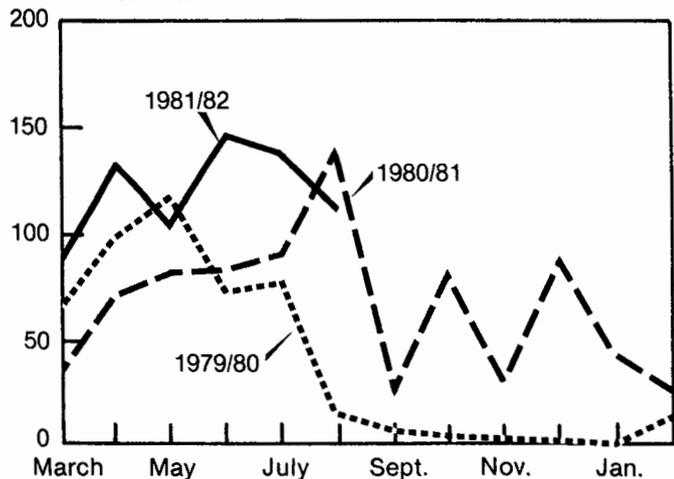
Because of its stature as a preferred oil, cottonseed oil prices will continue to command a premium over soybean oil. This year the premium may be about 2 cents a pound.

## Sunflowerseed

Sunflower acreage planted in the four major sunflower-producing States of North Dakota, South Dakota, Minnesota, and Texas in 1981 was 4.045 million acres, approximately the same as in 1980. With improved growing conditions, the acreage harvested and yield per acre are expected to be above last year. Indications are that approximately 3.9 million acres will be harvested in the four surveyed States with total U.S. acreage estimat-

## Monthly Brazilian Soybean Oil Exports

Thous. metric tons



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ed at 4.1 million. The average yield is expected to be 1,148 pounds an acre. Based on these figures, 1981 sunflower production is estimated at 4,739 million pounds (2.15 million metric tons). This compares with 3,946 million pounds (1.79 million metric tons) last year. The greater acreage harvested, combined with the higher yield, results in about a 20-percent increase in U.S. sunflower production over last year.

Sunflower crushings in the United States during 1980/81 reached a record 1.6 billion pounds (733 thousand metric tons), about one-third more than last year. This was partly due to the expansion in crushing capacity that came on stream last fall. Since additional U.S. sunflower crushing capacity is also slated for this coming season, it is expected that there will be another large increase in sunflower seed crushings, possibly reaching 2 billion pounds (900 thousand metric tons) in 1981/82. With additional promotion, domestic use is expected to increase considerably in 1981/82.

World demand for U.S. sunflower oil expanded sharply this year. Exports increased from 190 million pounds in 1979/80 to an estimated 640 million pounds in 1980/81. The strong showing in sunflowerseed oil exports, in part, reflects the shift to more domestic crush and a reduction in the exports of sunflowerseed as seed. On an oil equivalent basis, sunflower exports were up about 5 percent for the year. Major markets for sunflower oil in 1980/81 were Venezuela, Algeria, the Netherlands, and Egypt. Exports are expected to continue to rise in 1981/82 to 660 million pounds (300,000 metric tons).

Oil yield per ton of sunflowers crushed averaged 780 pounds or 39 percent for 1980/81, and meal yield averaged 1,150 pounds or 57.5 percent. Meal yield per ton dropped 4 percentage points from last season, reflecting the partial hulling of some processed sunflowers and resulting in a higher protein meal. The burning of these hulls produces energy for running the processing plant. Partial dehulling is a feature of a new processing plant designed especially for sunflowers. The plant started crushing operations this year. Meal yield per ton is expected to decrease further during 1981/82, as another similar plant comes on stream.

Even though domestic crushing of sunflowerseed is rising, the bulk of U.S. production is exported. U.S. sunflowerseed exports in 1980/81 were 3,319 million pounds

(1.51 million metric tons), down from 4,012 million (1.82 million metric tons) last year. The reduced exports were primarily caused by smaller purchases by West Germany and Italy. The short U.S. sunflower crop, the strengthening of the dollar against foreign currencies, and increased production of rapeseed in Europe were factors behind reduced purchases of U.S. sunflowerseed. The largest market for U.S. seed exports is Western Europe, with the EC-10 taking about 60 percent of exports in 1980/81. The Netherlands is the largest individual market, purchasing over 35 percent of U.S. sunflowerseed exports; followed by Mexico, 19 percent; Portugal, 16 percent; West Germany, 8 percent; and Italy, 7 percent. The USSR may import U.S. sunflowerseed for the first time ever in 1981/82.

The average price received by farmers for sunflowers in 1980/81—\$10.67—was about \$2.00 more per cwt than the \$8.92 price in 1979/80. The average price received in September, \$10.10 per cwt was slightly above a year ago. This is contrary to soybeans, for which average price per bushel in September was \$1.30 below a year ago (\$6.29 compared with \$7.59). The early October price of sunflower oil (crude, Minneapolis) was around 24.5 cents a pound, down from 28 cents, its mid-year peak. Due to the relatively short world supply of premium oils, sunflower oil is selling at about a 5-cent-a-pound premium over soybean oil. With the prospects for excellent cotton and sunflower crops in the United States and the increased supply of these oils, the premium of sunflower oil over soybean oil may narrow.

The U.S. House of Representatives has voted to establish a loan program for U.S. sunflower producers. The minimum loan rate was set at \$8.00 per CWT. This provision was not in the Senate version of the farm bill. This loan program will not cost the Treasury money because loans for sunflowers must be paid back within the same fiscal year.

## Peanuts

### Crop Recovers; Near Record Production

U.S. peanut production as of October 1 is forecast at 3.87 billion pounds, (farmers' stock basis), a sharp

**Table 2—Peanuts (farmers' stock basis): Supply, disappearance, and price, U.S.<sup>1</sup>**

Year beginning August 1	Supply			Disappearance					Price			
	Beginning stocks	Pro- duction	Imports	Total	Crush	Exports	Food	Seed, feed, loss, and shrinkage	Total	Average received by	Support	Quota additional
Million pounds												Cents/lb.
1976	1,060	3,739	1	4,800	1,108	783	1,789	513	4,193	20.0	20.70	—
1977	608	3,726	1	4,324	487	1,025	1,838	392	3,742	21.0	21.50	—
1978	581	3,952	1	4,534	527	1,141	1,996	284	3,948	21.1	21.00	12.5
1979	586	3,968	1	4,555	571	1,057	2,028	271	3,927	20.6	21.00	15.0
1980	628	2,308	401	3,337	446	503	1,647	328	2,924	24.0	22.75	12.5
1981	413	<sup>2</sup> 3,873	2	4,288	530	750	2,000	308	3,588	23.5	22.75	12.5

<sup>1</sup>Disappearance forecast for latest year. <sup>2</sup>October 1 crop estimate.

recovery from the drought-reduced crop last season and just 2 percent short of the 1979 record-large outturn. The indicated yield per acre of 2,524 pounds is 3 percent below 1979. Peanut acreage for harvest this year is a record 1.53 million acres. There was some hot weather in July, but temperatures were more moderate this season, and rains fell at fairly regular intervals over most of the growing season. Compared with 1980, in the Virginia-Carolina area, the peanut crop is up 74 percent; in the Southeast, 67 percent; and in the Southwest, 64 percent.

U.S. use of peanuts for food was off 19 percent in 1980/81 (August-July) because of short supply. Food use is expected to increase in 1981/82 because of the 28 percent larger supply. Last season, all use categories were lower, and retail prices of peanut butter and other peanut products jumped substantially.

Peanut crushings fell in the past season but are likely to rise this year with the larger supplies. Similarly, peanuts available for export will rise but are not expected to reach the level of 1979/80. Many growers have contracted a portion of their crop at premiums above the support levels, but the large outturn means a considerable share of the crop will sell close to support.

The U.S. Senate passed the 1981 farm bill, S. 884 on September 18, 1981, with some major changes affecting peanut program. Acreage allotments were eliminated, and the marketing quota was reduced to 1.24 million tons. Minimum support for quota peanuts is set at \$596 a ton for 1982, with cost-of-production adjustments for the 1983-85 crops. The House of Representatives voted on the peanut title of the 1981 farm bill, H.R. 3603 on October 15, 1981. Provisions were passed which would eliminate allotments and poundage quotas. Price support would be available at a level determined by the Secretary.

### Flaxseed

Flaxseed acreage planted for the 1981/82 crop declined for the third consecutive year, dropping 16 percent to 680,000 acres. Current forecasts indicate a mere 1-bushel-an-acre increase in yield, so production will fall short of last year's level. As a result, an additional 3.9 million bushels are likely to be imported from Canada to meet domestic needs.

Crushings during 1980/81 probably will total 11.5 million bushels, resulting in a stock drawdown. A crush of this size will produce 230 million pounds of linseed oil and 215,000 short tons of meal. An estimated 85 percent of the linseed oil produced will wind up in paints, varnishes, resins and plastics, or other drying-oil products. Meal supplies will be about evenly distributed between domestic and export markets.

Flaxseed prices in mid-September were \$6.39 a bushel, showing a seasonal decline from their peak of \$7.65 last May. Some price increase appears probable, so the season-average price received by farmers would average closer to \$6.75 a bushel.

### Palm Oil

Growth in world palm oil production in 1982 is expected to regain some of the momentum lost in 1981. Total world output is forecast to rise 7 percent to 5.4 million metric tons, with Malaysia, the principal producer, accounting for 50 percent of the increase.

Over the last 5 years, rising exports have nearly matched increases in production in major producing countries. Exports from these countries in 1982 are expected to reach about 3.3 million tons, 70 percent of which will be supplied by Malaysia. Major world importers of palm oil will include Singapore, India, Pakistan, and the Netherlands. Although not a major importer, the United States is forecast to import 140,000 metric tons in 1982, about the same as in 1981.

In the United States, palm oil is primarily used in the manufacture of baking and frying fats (shortening), where it competes with soybean oil. U.S. imports of palm oil are characteristically a function of the price relationship between palm oil and soybean oil. During October of 1980, the price of palm oil was almost 3 cents less than soy, and in the following December and February, imports of palm oil surged to 60 and 47 million pounds, respectively. The September 1981 palm oil price was 24.67 cents a pound, 5 cents over the corresponding soybean oil price (crude, Decatur). With palm oil production on the rise, prices are likely to be under pressure, causing the price spread to narrow, again and making it more attractive to maintain the 140,000-metric-ton import level.

**Table 3—Flaxseed: Supply, disappearance and price, U.S.**

Year beginning June 1	Supply				Disappearance				Price		
	Beginning stocks	Production	Imports	Total	Crush	Exports	Seed	Residual	Total	Average received by farmers	
	<i>1,000 bushels</i>										<i>Dol./bushel</i>
1976	4,890	7,820	2,168	14,878	10,677	196	1,043	-239	11,677	7.08	
1977	2,961	15,105	859	18,925	11,615	1,001	557	-388	12,785	4.54	
1978	5,315	8,614	1,557	15,486	13,009	91	724	-924	12,900	5.74	
1979	2,586	12,014	1,916	16,516	12,425	174	650	-1,751	11,498	5.97	
1980 <sup>1</sup>	5,018	8,128	2,364	15,510	11,927	76	547	76	12,626	7.27	
1981 <sup>1</sup>	2,884	7,893	3,900	14,677	11,500	45	632	0	12,177	6.75	

<sup>1</sup>Forecast.

## 1981/82 ANIMAL FATS OUTLOOK AND SITUATION

### Lard

Commercial lard production in the October 1980-September 1981 marketing year is projected at about 1.15 billion pounds, compared with 1.23 billion last year—a decline of about 7 percent. This reduction is primarily due to reduced hog slaughter and possibly a slight lowering in lard output per hog killed. Output of lard this fall and winter is expected to run about 8 percent below a year earlier, with all of 1981/82 production projected at 1.10 billion pounds.

Domestic use of lard in 1980/81 is expected to be about 1 billion pounds, down 10 percent from last year's 1.1 billion. With domestic use down more than production, additional lard has been available for export.

Lard exports and shipments through the first 9 months of 1980/81 were 121 million pounds or 60 percent above the same period in 1979/80. Due to increased export demand, stocks declined to a normal level. Exports for the remainder of the year will ease off, with exports for all of 1980/81 totaling about 142 million pounds, up 50 percent from last year's 94 million. Exports to Mexico have remained strong. Poland, a surprising newcomer, has taken 38 million pounds of U.S. lard between January 1 and September 1.

Lard prices (loose, tanks, Chicago) fell from about 24 cents in November to about 19 cents a pound in February and then stayed at this level through June because of abundant stocks of lard and large supplies of soybean oil. Because of reduced lard supplies, declining production and good export demand, prices started rising in July and, by the latter part of September, were back up to 23 cents a pound. With lard production continuing to decline because of lower hog slaughter, prices may remain strong in spite of the heavy supplies of soybean oil.

### Edible Tallow

Production of edible tallow for the 1980/81 is estimated at about 1,125 million pounds, up 14-percent. Edible tallow production in 1981/82 projected at 1,250 million pounds, will likely continue its upward climb and surpass lard output, because beef production is projected to increase and hog production is expected to slightly decrease.

The large increases in production of edible tallow in recent years is primarily a result of changes taking place in the meat packing industry. Formerly, beef carcasses were divided into small cuts at the retail store. Fat trimmed off while making these cuts often went to renderers manufacturing inedible tallow and grease. Now

more and more beef carcasses are being cut up into retail-size portions at the meat packing plant and shipped as "boxed beef". Since cutting and trimming is done in the meat packing plant under Federal Inspection, many of the fat trimmings can be rendered into edible tallow which commands a price premium over its inedible counterpart.

Domestic use of edible tallow in 1980/81 is running over 10 percent ahead of last year and for the entire year is projected at 1,030 million pounds. This is the first time that edible tallow use has been over 1 billion pounds. Edible tallow is primarily used in commercial and institutional shortening products.

Exports of edible tallow are also increasing rapidly. For the year, they are projected at 130 million pounds, almost double last year's 70 million pounds. Edible tallow prices have closely followed lard prices this year, and the early October price was about 23.5 cents a pound.

### Inedible Tallow

Production of inedible tallow and grease was down slightly during 1980/81. This is because some fat that formerly went into inedible tallow production is now being used to make edible tallow. Hog slaughter was reduced, although this was offset for the most part by an increase in poultry slaughter and a slight rise in the number of cattle slaughtered. Production of inedible tallow and grease in 1981/82 is projected to remain about the same, with a continued decline in hog slaughter accompanied by a slight rise in beef production.

Domestic use of inedible tallow and grease was running about the same as last year through the first 8 months of this marketing year. Use picked up in June and July and is now projected at about 3,050 million pounds for all of 1980/81, up from 2,980 million in 1979/80. Increased use was primarily in fatty acids.

Exports of inedible tallow and grease for 1980/81 will likely be close to last year's total of 3,107 million pounds. The major markets in 1980, Egypt, the Republic of Korea, the Netherlands, and Japan, are continuing to take large quantities in 1981. In addition, the USSR and India have increased their purchases this year, with the USSR becoming a major market.

Inedible tallow prices (bleachable, fancy, Chicago) have remained very stable since early January—at about 18 cents a pound. Early October prices were 18-1/2 to 19 cents a pound. With the large stocks of soybean oil hanging over the market and production of inedible tallow and grease remaining about the same in 1981/82, it is doubtful that there will be much of a rise in prices. However, if the demand for use in manufacturing fatty acids continues to increase as it did in July, prices could rise.

# Regional Soybean Production Since 1960 And the Outlook for the 1980's

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Soybean production in the United States doubled during both the 1960's and the 1970's. Between 1960 and 1979 production increased at an average of about 85 million bushels a year. The expansion was the result of acreage increasing about 2 million acres a year and yields about .34 bushels a year.

While production increased in all regions<sup>2</sup> over the last three decades, it increased at a faster rate in the South—the Delta and the Southeast. During the 1950's, the Eastern Corn Belt accounted for almost half of total U.S. soybean production, the Western Corn Belt contributed slightly over a third, and the South produced less than a sixth. By the 1970's, the Eastern Corn Belt's share had dropped to about a third, the Western Corn Belt still contributed about a third, and the South's contribution had increased to slightly over a fourth.

Between 1960 and 1980, acreage expanded about 650,000 acres annually in the Western Corn Belt, 600,000 in the Delta, 470,000 in the Eastern Corn Belt, and 300,000 in the Southeast. The increase in soybean acreage in the Corn Belt coincided with a decline in oats area and a rise in total cropland. Soybean acreage increases in the South coincided with some cropland increases and with declines in cotton, corn, and oats acreage.

During the 1950's and early 1960's yields increased at a rate of about .5 bushels annually in all regions. Since the late 1960's, the increase in yields has continued at the .5-bushel rate in the Corn Belt regions but has slowed to about .2 bushels in the Delta, and has seemingly stagnated in the Southeast, where yields are holding at about 22 bushels an acre.

The major factors influencing production during the 1980's will probably be those that affect acreage, because yields, are expected to continue growing on a regional basis at about the trend rate, with the possible exception of the South, where double-cropping may effect yields.

The primary factor influencing acreage will be the net returns from soybeans compared with returns from alternative crops. If soybeans are more profitable than other crops, soybeans will take acreage away from the other crops and vice versa. In the Corn Belt the biggest competition for land will be between corn and soybeans. In the South, soybean's primary competition will come from corn, cotton, and rice. For the 1980's, indications are that soybeans will probably be less competitive in the Corn Belt and more competitive in the South.

If soybeans and other crops are profitable enough, they will draw new cropland into production. While there is still potential cropland not being used in each region, the amount is limited, and there are possible problems associated with bringing new land into production. In the Corn Belt, these problems are erosion, high water tables, and occasional floods. In the South, difficulties are related to dense forests, high water tables, and occasional floods. However, there is a greater potential for increasing cropland in the South than in the Corn Belt.

Another consideration is the effect double-cropping will have upon soybean acreage in the South and the southern areas of the Corn Belt. It is too early to determine the long-run effect of double-cropping; however, it does appear that it will be widely adopted in the areas that have a long growing season—around 170 to 180 freeze-free days. Unless unexpected problems develop, double-cropped soybeans and winter wheat are often more profitable than single-cropped corn, cotton, or rice—the major competing crops. In addition to profit considerations, farmers also like the fact that double-cropping keeps a crop on the land year-round which helps to reduce erosion. Overall, double-cropping is expected to contribute to an increase in soybean acreage during the 1980's. In 1981, double-cropped soybeans accounted for over a fourth of all soybeans in the South.

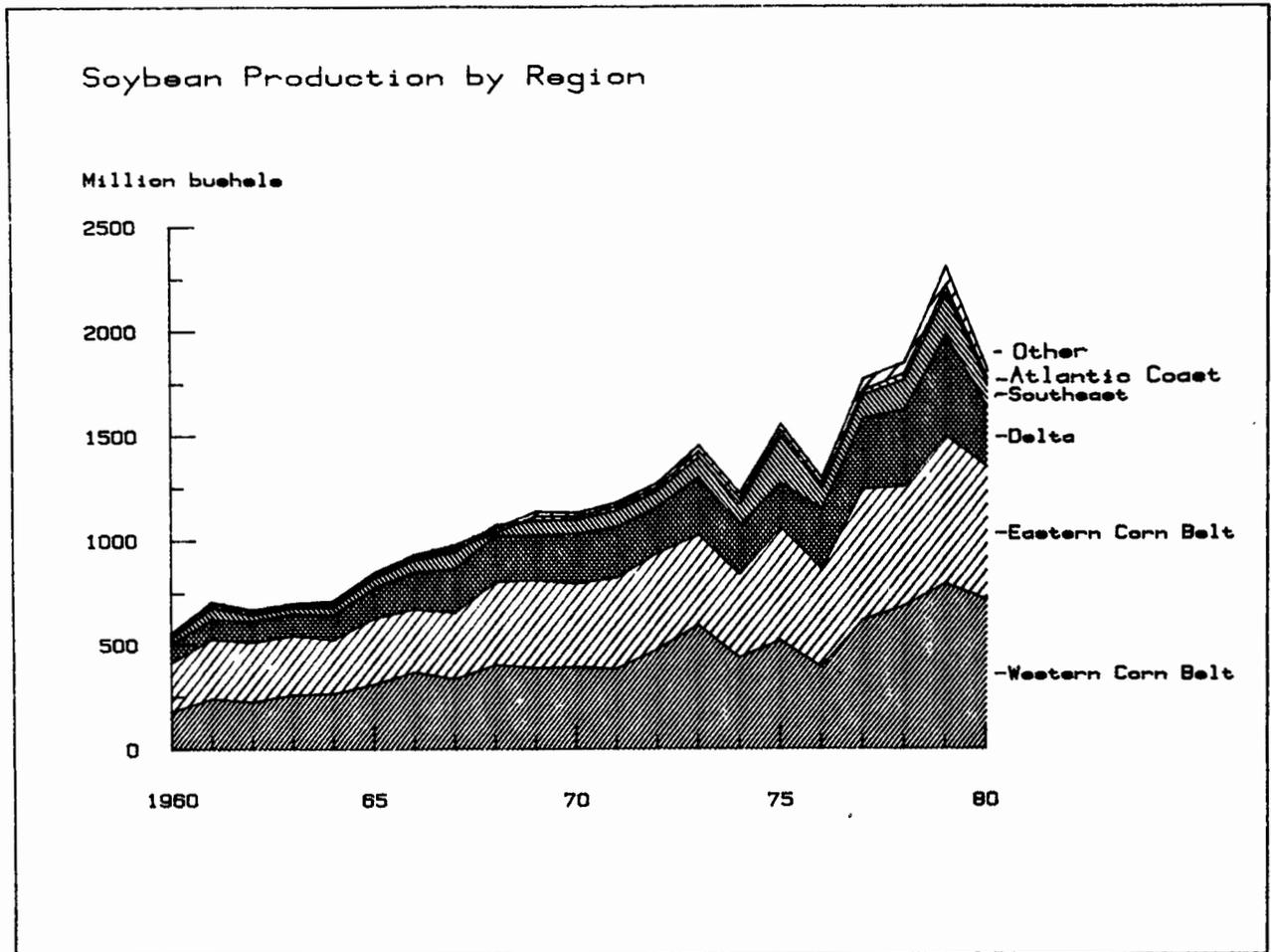
## Western Corn Belt

The Western Corn Belt produced about 35 percent of the national output of soybeans during each of the past three decades. Production in this region increased from 176 million bushels in 1960 to 390 million in 1970 and finally to 713 million in 1980. Between 1960 and 1980, planted acreage increased about 650,000 acres. Currently, soybeans account for about 25 percent of the total cropland in the region, while corn makes up about 40 percent. During the 1960's and the 1970's, soybean yields rose about half a bushel a year.

If the acreage trend for the last two decades was to continue, soybean acreage would increase to about 28

<sup>1</sup>The authors wish to thank Milton Ericksen and Sherrie Meyer for their comments and Barbara Barnes for preparing the chart.

<sup>2</sup>The regions are the Western Corn Belt with Missouri, Iowa, Minnesota, Nebraska, Kansas, South Dakota, and North Dakota; the Eastern Corn Belt with Illinois, Indiana, Ohio, and Michigan; the Delta with Arkansas, Louisiana, Mississippi, Tennessee, and Kentucky; the Southeast with Alabama, Georgia, North Carolina, and South Carolina; the Atlantic Coast with Virginia, Maryland, and Delaware; and Other States with Florida, New Jersey, New York, Oklahoma, Pennsylvania, Texas, and Wisconsin.



**Table 4—Average regional soybean production and market shares**

Region	1950-59		1960-69		1970-79		1979-81	
	<i>Million bushels</i>	<i>Percent</i>						
Western Corn Belt	144	35	305	36	542	35	755	37
Eastern Corn Belt	193	46	318	37	526	34	655	32
Delta	50	12	156	18	297	19	381	19
Southeast	14	3	46	6	109	7	157	8
Atlantic Coast	10	3	15	2	23	2	31	2
Other	6	1	13	2	37	3	53	3
United States	416	100	854	100	1,535	100	2,034	100

**Table 5—Soybean acreage planted by region**

Year	Western Corn Belt	Eastern Corn Belt	Delta	South- east	Atlantic Coast	Other States	United States
<i>Million acres</i>							
1960	8.2	9.2	4.4	1.5	0.7	0.4	24.4
1961	9.8	10.3	4.8	1.6	0.8	0.5	27.8
1962	9.8	10.5	5.2	1.6	0.9	0.5	28.4
1963	10.2	10.4	5.8	1.8	0.8	0.5	29.5
1964	11.5	10.8	6.2	2.0	0.8	0.5	31.7
1965	13.4	11.5	6.9	2.2	0.7	0.6	35.2
1966	14.0	11.5	7.9	2.6	0.7	0.6	37.3
1967	14.8	11.7	9.3	3.4	0.8	0.8	40.8
1968	14.9	12.8	9.7	3.3	0.8	0.9	42.3
1969	14.0	13.2	10.5	3.1	0.8	1.0	42.5
1970	14.6	13.2	10.6	3.1	0.8	0.8	43.1
1971	13.9	13.8	10.8	3.5	0.8	0.7	43.5
1972	15.4	15.0	10.8	3.9	0.8	1.0	46.9
1973	19.9	17.9	11.8	4.7	1.0	1.3	56.6
1974	18.2	16.3	11.2	4.6	1.0	1.2	52.5
1975	18.0	15.7	13.1	5.4	1.0	1.3	54.6
1976	16.2	14.4	13.0	4.5	0.9	1.3	50.3
1977	18.3	17.0	14.8	5.7	1.0	2.0	59.0
1978	20.7	18.0	15.5	7.0	1.0	2.1	64.7
1979	23.6	19.3	17.1	8.2	1.2	2.3	71.6
1980 <sup>1</sup>	22.8	18.3	15.8	7.8	1.3	2.0	70.1

<sup>1</sup>Preliminary.

million acres, 5 million more than in 1980. This acreage with trend yields of 37.7 bushels a acre, would produce over 1 billion bushels in 1990.

While the 1990 trend for soybean acreage in the Western Corn Belt would indicate an increase of 5 million acres above 1980, it is unlikely that the trend is an appropriate indicator for the eighties. In the past, soybean area has expanded, in part, by displacing oats. Recently, this displacement appears to have halted, with oats holding at about 6 million acres in the region. While there is potential for new cropland to be brought into production, it appears doubtful that soybeans would take much of it because of the competition from corn given current and foreseeable net return relationships.

### Eastern Corn Belt

The Eastern Corn Belt produced about 46 percent of U.S. soybean output during the 1950's. The share dropped to 37 percent during the 1960's, and to 34 percent during the 1970's. While trends would indicate over 23 million acres by 1990, it is again doubtful that trend is a good indicator for the eighties. Like the Western Corn Belt, the competition for land argues against continued increases at past rates. Competition from corn will be keen. There is a potential for some expansion of double cropped acreage in Southern Illinois and Indiana. Any expansion of cropland in the Eastern Corn Belt will face problems similar to those in the Western Corn Belt.

### Delta

The Delta has steadily increased its market share of soybean production in the United States, from 12 percent during the 1950's to 19 percent in the 1970's. Production rose from 90 million bushels in 1960 to around 400 million bushels by the end of the 1970's. Between 1960 and 1980, soybean acreage increased about 600,000 acres a year, the bulk of which came from new cropland. Some land was taken from corn, cotton, and oats. Soybeans currently account for over 60 percent of the total cropland in the Delta region. Over the last two decades, soybean yields have increased slightly less than .2 bushels a year.

Based on a 1960 to 1980 trend, soybean acreage in the region should be about 22 million by 1990, about 6 million above 1980. With this acreage and trend yields of 26.7 bushels an acre, trend production for 1990 will be a little under 600 million bushels.

In contrast to the Northern regions, an increase of 6 million acres by 1990 would not be unreasonable under current and expected price relationships. The main factor behind this possibility is the anticipated increase in double-cropped soybeans and winter wheat. Increases in soybean acreage would likely come from corn, cotton, and new cropland. Soybeans could be expected to be competitive for corn and cotton because of the relative profitability of double-cropped soybeans and wheat. Double-cropped soybeans in the Delta expanded from about 1 million acres in 1979, roughly 5 percent of the region's

**Table 6—Soybean yields by region**

Year	Western Corn Belt	Eastern Corn Belt	Delta	South east	Atlantic Coast	United States
<i>Bushels per acre</i>						
1960	22.2	25.9	21.6	21.0	23.9	23.5
1961	24.9	28.2	20.6	21.2	22.4	25.1
1962	23.2	27.6	21.3	20.8	20.2	24.2
1963	25.7	27.7	18.7	19.9	16.4	24.4
1964	23.2	24.4	20.2	22.2	16.7	22.8
1965	23.4	27.9	22.1	22.6	23.2	24.5
1966	26.3	26.8	23.4	23.6	15.9	24.4
1967	23.1	27.3	23.5	24.2	24.2	24.5
1968	27.4	31.2	23.6	16.6	20.7	26.7
1969	28.3	32.2	21.3	24.0	28.1	27.4
1970	27.2	30.3	23.0	22.3	21.4	26.7
1971	27.6	32.1	23.0	23.9	25.6	27.5
1972	31.1	31.3	21.3	20.2	24.8	27.8
1973	30.0	30.0	23.8	21.4	28.6	27.8
1974	24.2	24.8	21.5	22.2	25.8	23.7
1975	29.0	34.4	24.6	23.8	26.0	28.9
1976	24.4	32.7	22.5	21.7	22.8	26.1
1977	34.0	36.9	23.5	20.9	22.9	30.6
1978	32.9	33.2	24.2	21.1	29.6	29.4
1979	33.6	37.1	28.5	25.2	29.3	32.1
1980 <sup>1</sup>	31.4	34.5	18.3	14.8	18.8	26.8

<sup>1</sup>Preliminary.

total soybean acreage, to nearly 3 million acres in 1981, about 20 percent of total soybean area. Soybeans should be competitive for additional acres from new cropland, although problems of high-density forests, high water tables, and occasional floods will have to be overcome.

increases during the next decade. Continued expansion double-cropped soybeans and wheat is a major factor supporting the competitiveness of soybeans.

### Southeast

The Southeast region produced only about 3 percent of the national soybean output during the 1950's. By the 1970's this region increased its share to 7 percent. In terms of bushels, the region produced 26 million in 1960. Production climbed to 65 million bushels in 1970 and rose to 150 to 200 million bushels by the end of the 1970's. From 1960 to 1980 soybean acreage increased a little over 300,000 acres a year being planted on new cropland and as well as land that had been used for cotton, corn, and oats. Soybeans currently account for slightly over half of the total cropland in the region. Since the mid 1960's, soybean yields have held steady at about 22 bushels an acre.

If trends established over the last two decades were to hold, 1990 would show about 10 million acres of soybeans. With yields of 22 bushels an acre production would be slightly over 200 million bushels.

Under favorable conditions for soybeans, the Southeast has the potential to sustain or even surpass the trend

### Atlantic Coast and Other States

The Atlantic Coast region has produced about 2 percent of the nation's soybeans during the past two decades. Production in the Other States which was about 2 percent of total output during the 1960's, increased to 3 percent during the 1970's. Compared to the 1960's, production during the 1970's was up 54 percent in the Atlantic coast region and 184 percent in the Other States. Output increased at an annual rate of 4.4 percent in the Atlantic Coast region and 10.5 percent in the Other States from the 1960's to the 1970's.

Trends would show soybean production between 1980 and 1990 up 42 percent in the Atlantic Coast region and 98 percent in the Other States. Trend-estimated output for 1990 in the Atlantic Coast region shows production increasing very slightly from the 31 million bushels averaged between 1979 and 1981. Over the last two decades, output in the Other States has increased at an annual rate of 10.4 percent. Given this rate, output in these States could reach 108 million bushels by 1990.

**Table 7—Soybean production by region**

Year	Western Corn Belt	Eastern Corn Belt	Delta	South- east	Atlantic Coast	Other	United States
<i>Million bushels</i>							
1960	178.6	235.6	89.8	26.1	16.8	7.9	555.0
1961	240.7	288.0	93.8	28.8	17.7	9.4	678.5
1962	225.7	286.3	103.3	29.2	16.3	8.2	669.1
1963	259.3	285.5	104.1	30.8	11.6	8.0	699.1
1964	264.4	258.8	119.0	38.2	11.9	8.4	700.9
1965	308.3	317.7	146.8	45.6	16.0	11.0	845.6
1966	366.6	304.3	176.9	56.2	11.1	13.1	928.4
1967	335.6	317.6	211.1	76.2	17.3	18.4	976.4
1968	402.5	396.7	222.2	48.6	15.2	21.5	1,106.9
1969	386.1	419.4	215.6	69.8	20.4	21.5	1,133.1
1970	390.5	398.3	238.3	65.7	15.1	18.9	1,127.1
1971	380.8	437.9	240.9	79.1	19.3	17.8	1,176.1
1972	473.6	461.6	220.3	75.1	19.3	20.4	1,270.6
1973	588.7	530.9	275.2	97.0	26.9	28.6	1,547.5
1974	433.4	398.2	232.3	99.1	25.5	27.4	1,216.2
1975	515.6	539.2	311.6	124.1	25.6	31.8	1,548.3
1976	389.4	467.6	285.9	94.5	20.4	30.5	1,288.6
1977	615.9	622.1	340.3	111.0	22.5	55.1	1,767.2
1978	680.7	569.9	367.0	143.8	30.6	49.6	1,868.7
1979	787.2	707.0	477.3	200.7	33.6	92.1	2,267.9
1980 <sup>1</sup>	713.6	633.3	286.8	115.2	23.7	44.3	1,817.1

<sup>1</sup>Preliminary.

**Table 8—Oilseeds: Acreage and production, U.S.**

Item	Unit	1977	1978	1979	1980 <sup>4</sup>	1981 <sup>5</sup>
<b>Soybean<sup>1</sup></b>						
Acreage:						
Planted	1,000 acres	58,987	64,708	71,632	70,087	68,540
Harvested	"	57,830	63,663	70,566	67,856	67,349
Production:						
Per acre harvested	Bushels	30.6	29.4	32.1	26.4	31.5
Total	Mil. bushels	1,767.3	1,868.8	2,267.9	1,792.1	2,106.6
<b>Cottonseed<sup>2</sup></b>						
Acreage:						
Planted	1,000 acres	13,680	13,375	13,978	14,534	14,306
Harvested	"	13,275	12,400	12,831	13,215	13,766
Production:						
Per acre harvested	Pounds	832	689	901	677	894
Total	1,000 tons	5,521	4,269	5,778	4,471	6,153
<b>Flaxseed</b>						
Acreage:						
Planted	1,000 acres	1,410	710	922	809	680
Harvested	"	1,314	687	878	703	640
Production:						
Per acre harvested	Bushels	11.5	12.5	13.7	11.6	12.3
Total	Mil. bushels	15,105	8,614	12,014	8,128	7,893
<b>Peanuts<sup>1</sup></b>						
Acreage:						
Planted	1,000 acres	1,545	1,541	1,546	1,521	1,563
Harvested	"	1,516	1,509	1,520	1,399	1,534
Production:						
Per acre harvested	Pounds	2,458	2,619	2,611	1,650	2,524
Total	Mil. pounds	3,726	3,952	3,968	2,308	3,864
<b>Sunflowerseed<sup>3</sup></b>						
Acreage:						
Planted	1,000 acres	2,321	2,840	5,555	4,010	4,045
Harvested	"	2,205	2,798	5,410	3,683	3,915
Production:						
Per acre harvested	Pounds	1,252	1,365	1,349	1,016	1,148
Total	Mil. pounds	2,760	3,818	7,296	3,742	4,493
<b>Total 5 oilseeds</b>						
acres planted	Mil. acres	78	83	94	91	89

<sup>1</sup> Soybeans and peanuts planted acreage grown alone for all purposes. <sup>2</sup> Cotton acreage and cottonseed production. <sup>3</sup> Minnesota, North Dakota, South Dakota and Texas. <sup>4</sup> Preliminary. <sup>5</sup> 1981 based on October indications.

**Table 9—Soybeans: Supply, disappearance, and price, U.S.**

Year beginning September 1	Supply			Disappearance					Price		
	Beginning stocks	Pro- duction	Total	Crush	Exports	Seed and feed	Residual <sup>1</sup>	Total	Ending stocks	Season average received by farmers	
	<i>Million bushels</i>										<i>Dol./bu.</i>
1977	103	1,767	1,870	927	700	69	13	1,709	161	5.88	
1978	161	1,869	2,030	1,018	739	76	23	1,856	174	6.66	
1979	174	2,268	2,442	1,123	875	68	17	2,083	359	6.28	
1980	359	1,792	2,151	1,020	724	66	21	1,831	320	7.61	
1981 <sup>2</sup>	320	2,107	2,427	1,080	840	70	17	2,007	420	5.50-7.00	
1982 <sup>2</sup>	420										

<sup>1</sup>Mostly statistical discrepancies. <sup>2</sup>Forecast.**Table 10—Soybean meal: Supply, disappearance, and price, U.S.**

Year beginning October 1	Supply				Disappearance				Price		
	Stocks <sup>1</sup>	Production			Total	Exports	Shipments to U.S. territories	Domestic <sup>3</sup>	Total	Ending stocks	44 percent protein, Decatur
		Total <sup>2</sup>	Animal feed	Edible protein							
	<i>1,000 short tons</i>										<i>Dol./ton</i>
1977	228	22,371	21,405	410	22,599	6,080	61	16,276	22,356	243	163.56
1978	243	24,354	23,205	368	24,597	6,610	47	17,720	24,330	267	190.06
1979	267	27,105	25,930	297	27,372	7,908	60	19,238	27,146	226	181.91
1980	226	24,309	—	—	24,535	6,900	—	17,385	24,285	250	218.20
1981 <sup>4</sup>	250	25,700	—	—	25,950	7,300	—	18,350	25,680	270	170.00-195.00
1982 <sup>4</sup>	270										

<sup>1</sup>Stocks at processor plants. <sup>2</sup>Includes production of millfeed (hull meal). <sup>3</sup>Includes shipments to U.S. territories.**Table 11—Soybean oil: Supply, disappearance, and price, U.S.**

Year beginning October 1	Supply			Disappearance				Price		
	Beginning stocks	Produc- tion	Total	Exports	Shipments to U.S. territories	Domestic <sup>1</sup>	Total	Ending stocks	Crude, Decatur	
	<i>Million pounds</i>									<i>Cents/lb.</i>
1977	771	10,288	11,059	2,057	80	8,273	10,330	729	24.5	
1978	729	11,323	12,052	2,334	77	8,942	11,276	776	27.2	
1979	776	12,105	12,881	2,690	57	8,981	11,671	1,210	24.3	
1980	1,210	11,165	12,375	1,600	—	9,050	10,650	1,725	22.5	
1981 <sup>2</sup>	1,725	11,770	13,495	2,250	—	9,450	11,700	1,795	20.0-24.0	
1982 <sup>2</sup>	1,795									

<sup>1</sup>Includes shipments to U.S. territories. <sup>2</sup>Forecast.

**Table 12—Soybeans: Supply, disappearance, and price, by months, U.S.**

Year beginning September 1	Supply		Disappearance		Price
	Beginning stocks at mills	Crush	Exports	Ending stocks at mills	Average received by farmers
		<i>1,000 bushels</i>			<i>Dol./bu.</i>
1978/79					
September	37,873	71,431	37,971	31,889	6.20
October	31,889	89,273 ✓	87,551	138,415	6.26
November	138,415	89,616	101,681	149,355 ✓	6.41
December	149,355 †	96,369	70,591	127,343	6.49
January	127,343	90,579 ✓	76,979	112,358	6.58
February	112,358	81,501	53,161	124,049 ✓	6.99
March	124,049 †	89,037 ✓	83,536	120,872	7.16
April	120,872	83,312	67,668	96,716	7.06
May	96,716	86,920	46,799	71,091 ✓	7.06
June	71,091 †	82,777	40,866	72,996	7.36
July	72,996	80,600 ✓	32,680	55,594	7.36
August	55,594	76,403	39,671	37,460	7.07
Total		1,017,818	739,154		
1979/80					
September	37,460 †	75,877	40,862	39,206	6.81
October	39,206	95,807 ✓	88,854 ✓	166,528	6.35 ✓
November	166,528	101,408	118,123	184,518	6.30 ✓
December	184,518 †	104,392	78,305	163,295	6.27
January	163,295	106,622 ✓	85,778 ✓	145,438	6.39 ✓
February	145,438 †	100,019	72,990	130,711	6.20
March	130,711	102,246	69,353	118,634	5.94
April	118,634	91,971 ✓	81,297 ✓	95,782	5.63 ✓
May	95,782	93,828	74,173	79,746	5.76 ✓
June	79,746	82,661	58,693	75,737	5.91 ✓
July	75,737	84,854 ✓	49,076 ✓	73,936	6.75 ✓
August	73,936	83,691	57,669	56,860	7.18
Total		1,123,382	875,173		
1980/81					
September	56,860	81,602	41,402	80,390	7.59
October	80,390	97,762 ✓	60,262 ✓	166,038	7.68 ✓
November	166,038	98,484	75,042	171,971	8.18
December	171,971	94,132	74,488	138,742	7.80
January	138,742	92,153 ✓	71,726 ✓	125,887	7.80
February	125,887	79,599	55,457	105,408	7.50
March	105,408	88,698	103,188	97,234	7.59
April	97,234	85,377 ✓	59,962 ✓	84,438	7.60 ✓
May	84,438	82,285	69,629	67,833	7.42
June	67,833	73,435	41,776	49,157	7.10
July <sup>1</sup>	49,157	72,330 ✓	29,574 ✓	43,855	7.16 ✓
August <sup>1</sup>	43,855	74,640	41,789	33,386	6.71 ✓
Total		1,020,497	724,295		

<sup>1</sup>Preliminary.

**Table 13—Soybean meal: Supply, disappearance, and price, by months U.S.**

Year beginning October 1	Supply		Disappearance				Price	
	Beginning stocks <sup>1</sup>	Production <sup>2</sup>	Total	Domestic use	Exports	Total	Ending stocks <sup>1</sup>	44 percent protein, Decatur
<i>1,000 short tons</i>							<i>Dol./ton</i>	
<b>1978/79</b>								
October	242.9	2,114.7	2,357.6	1,640.6	477.5	2,118.1	239.5	176.80
November	239.5	2,135.4	2,374.9	1,661.5	507.5	2,169.0	205.9	177.10
December	205.9	2,292.2	2,498.1	1,470.5✓	738.5✓	2,209.0	289.1	188.75
January	289.1	2,158.3	2,447.4	1,546.2	659.0	2,205.2	242.2	184.90
February	242.2	1,954.8	2,197.0	1,445.5	526.5	1,972.0	225.0	190.90
March	225.0	2,121.6	2,346.6	1,204.7✓	903.7✓	2,108.4	238.2✓	194.50
April	238.2	1,989.0	2,227.2	1,455.0	507.5	1,962.5	264.7	191.10
May	264.7	2,065.1	2,329.8	1,639.0	453.6	2,092.6	237.2	188.00
June	237.2	1,979.3	2,216.5	1,474.6✓	502.9✓	1,977.5	239.0✓	209.60
July	239.0	1,898.4	2,137.4	1,331.4	543.7	1,875.1	262.3	201.60
August	262.3	1,823.9	2,086.2	1,502.2	410.3	1,912.5	173.7	188.90
September	173.7	1,821.7	1,995.4	1,348.9✓	379.1	1,728.0	267.4✓	188.60
Total <sup>3</sup>		24,354.4		17,720.1	6,609.8			190.06
<b>1979/80</b>								
October	267.4	2,285.8	2,553.2	1,805.2	513.7	2,318.9	234.3	181.40
November	234.3	2,433.3	2,667.6	1,920.3	552.1	2,472.4	195.2	183.10
December	195.2	2,506.1✓	2,701.3	1,703.4✓	757.4	2,460.8	240.5✓	188.00✓
January	240.5	2,555.1	2,795.6	1,804.7	806.6	2,611.3	184.3	180.20
February	184.3	2,400.0	2,584.3	1,462.9	930.1	2,393.0	191.3	174.25
March	191.3	2,454.4✓	2,645.7	1,513.5✓	881.1✓	2,394.6	251.1✓	164.60✓
April	251.1	2,203.1	2,454.2	1,566.9	661.2	2,228.1	226.1	154.20
May	226.1	2,247.1	2,473.2	1,423.5	750.7	2,174.2	299.0	166.50
June	299.0	1,987.8✓	2,286.8	1,426.7✓	558.0✓	1,984.7	302.1✓	160.90✓
July	302.1	2,058.4	2,360.5	1,524.1	568.6	2,092.7	267.8	187.90
August	267.8	2,011.5	2,279.3	1,638.1	379.1	2,017.2	262.1	207.40
September	262.1	1,962.5✓	2,224.6	1,449.1	549.9✓	1,999.0	225.6✓	234.50
Total <sup>3</sup>		27,105.1		19,238.4	7,908.5			181.91
<b>1980/81</b>								
October	225.6	2,325.7	2,551.3	1,856.9	452.0	2,308.9	242.4	246.40
November	242.4	2,366.5	2,608.9	1,774.1	453.4	2,227.5	381.4	261.40
December	381.4	2,248.5✓	2,629.9	1,628.7✓	751.5✓	2,380.2	249.7✓	223.70✓
January	249.7	2,207.8	2,457.5	1,554.3	660.6	2,214.9	242.6	223.50
February	242.6	1,905.3	2,147.9	1,140.0	759.8	1,899.8	248.1	212.50
March	248.1	2,141.1✓	2,389.2	1,175.6✓	942.2✓	2,117.8	271.4✓	210.40✓
April	271.4	2,047.9	2,319.3	1,307.3	800.3	2,107.6	211.7	222.00
May	211.7	1,963.2	2,174.9	1,360.9	526.4	1,887.3	287.6	221.00
June	287.6	1,765.3✓	2,052.9	1,424.7✓	387.1✓	1,811.8	241.1✓	200.90✓
July <sup>4</sup>	241.1	1,734.4	1,975.5	1,466.7	320.0	1,786.7	188.8	204.10
August <sup>4</sup>	188.8	1,783.9	1,972.7	1,321.9	416.9	1,738.8	233.9	202.25
September	233.9							
Total <sup>3</sup>								

<sup>1</sup>Includes stocks of millfeed. <sup>2</sup>Includes production of millfeed (hull meal). <sup>3</sup>Totals may not match annual totals due to rounding. <sup>4</sup>Preliminary.

**Table 14—Soybean oil: Supply, disappearance, and price, by months, U.S.**

Year beginning October 1	Supply			Disappearance			Ending stocks	Price Crude, tanks, f.o.b. Decatur
	Beginning stocks	Pro- duction	Total	Domestic	Exports	Total		
				1,000 pounds				Cents/lb.
1978/79								
October	728,638	984,273	1,712,911	795,494	103,991	899,485	813,426	26.7
November	813,426	974,789	1,788,215	787,904	163,220	951,124	837,091	24.1
December	837,091	1,050,392	1,887,438	721,936	194,947	916,883	970,555	25.3
January	970,555	989,059	1,959,614	797,094	230,303	1,027,397	932,217	25.8
February	932,217	902,274	1,834,491	617,721	273,950	891,671	942,820	27.3
March	942,820	982,248	1,925,068	715,769	205,117	920,886	1,004,182	27.8
April	1,004,182	939,613	1,943,795	759,605	196,900	956,505	987,290	26.7
May	987,290	964,699	1,951,989	798,686	110,336	909,022	1,042,967	26.3
June	1,042,967	930,513	1,973,480	746,144	304,426	1,050,570	922,910	27.6
July	922,910	899,896	1,822,806	732,649	174,793	907,442	915,364	29.2
August	915,364	856,658	1,772,022	754,731	202,223	956,954	815,068	29.2
September	815,068	848,949	1,664,017	713,968	174,291	888,259	775,758	30.0
Total		11,323,363		8,941,701	2,334,497			27.2
1979/80								
October	775,758	1,020,324	1,796,082	841,559	134,737	976,296	819,786	27.9
November	819,786	1,067,867	1,887,653	801,646	218,683	1,020,329	867,324	27.8
December	867,324	1,101,961	1,969,285	675,189	263,954	939,143	1,030,142	26.2
January	1,030,142	1,115,332	2,145,474	809,029	181,255	990,284	1,155,190	23.6
February	1,155,190	1,064,899	2,220,089	757,021	258,529	1,015,550	1,204,539	23.4
March	1,204,539	1,098,117	2,302,656	794,529	332,248	1,126,777	1,175,879	22.1
April	1,175,879	993,699	2,169,578	709,204	276,687	985,891	1,183,687	20.3
May	1,183,687	1,009,793	2,193,480	714,252	334,414	1,048,666	1,144,814	20.8
June	1,144,814	901,602	2,046,416	617,957	202,567	820,524	1,225,892	21.7
July	1,225,892	927,793	2,153,685	725,576	123,080	848,656	1,305,029	26.2
August	1,305,029	913,801	2,218,830	774,803	181,056	955,859	1,262,971	25.9
September	1,262,971	890,127	2,153,098	759,983	182,945	942,928	1,210,170	26.1
Total		12,105,315		8,980,748	2,690,155			24.3
1980/81								
October	1,210,170	1,080,226	2,290,396	796,957	119,583	916,540	1,373,856	25.1
November	1,373,856	1,077,611	2,451,467	690,070	94,146	784,216	1,667,251	26.7
December	1,677,251	1,024,270	2,701,521	833,843	129,891	963,734	1,737,787	22.6
January	1,737,787	1,010,554	2,748,341	732,255	116,019	848,274	1,900,067	22.9
February	1,900,067	887,847	2,787,914	690,593	121,040	811,633	1,976,281	20.8
March	1,976,281	991,315	2,967,596	739,942	210,980	950,922	2,016,674	23.1
April	2,016,674	954,185	2,970,859	761,630	90,749	852,379	2,118,480	23.4
May	2,118,480	914,705	3,033,185	752,768	114,848	867,616	2,166,299	21.6
June	2,166,299	830,719	2,997,018	733,369	125,090	858,459	2,138,559	21.3
July <sup>1</sup>	2,138,559	815,798	2,954,357	833,907	96,038	929,945	2,024,412	22.8
August <sup>1</sup>	2,024,412	826,522	2,850,934	1,081,027	301,398	779,629	1,769,907	20.8
September <sup>1</sup>	1,769,907							19.4
Total								22.5

<sup>1</sup>Preliminary.

**Table 15—Soybeans: Monthly value of products per bushel of soybeans processed, and spot price spread**

Date	Value of products per bushel						Total value	Percent of value		Price	Spread between value of products and soybean price
	Soybean oil			Soybean meal				Soybean oil	Soybean meal	No. 1 yellow III. points	
	Yield	Price	Value	Yield	Price	Value					
Pounds	Cents	Dollars	Pounds	Dollars	Dollars	Dollars	Percent	Dollars			
<b>1979/80</b>											
September	11.19	30.0	3.36	48.02	188.60	4.53	7.89	43	57	7.04	0.85
October	10.65	27.9	2.97	47.72	181.40	4.33	7.30	41	59	6.56	.74
November	10.53	27.8	2.93	47.99	183.10	4.39	7.32	40	60	6.52	.76
December	10.56	26.2	2.77	48.01	188.00	4.51	7.28	38	62	6.53	.75
January	10.46	23.6	2.47	47.93	180.20	4.32	6.79	36	64	6.36	.43
February	10.65	23.4	2.49	47.99	174.25	4.18	6.67	37	63	6.42	.25
March	10.74	22.1	2.37	48.01	164.60	3.95	6.32	38	63	6.07	.25
April	10.80	20.3	2.19	47.91	154.20	3.69	5.88	37	63	5.80	.08
May	10.76	20.8	2.24	47.90	166.50	3.99	6.23	36	64	6.04	.19
June	10.91	21.7	2.37	48.10	160.90	3.87	6.24	38	62	6.10	.14
July	10.93	26.2	2.86	48.52	187.90	4.56	7.42	39	61	7.22	.20
August	10.92	25.9	2.83	48.07	207.40	4.98	7.81	36	64	7.45	.36
<b>1980/81</b>											
September	10.91	26.1	2.85	48.10	234.50	5.64	8.49	34	66	8.13	.36
October	11.05	25.1	2.77	47.58	246.40	5.86	8.63	32	68	8.27	.36
November	10.94	26.7	2.92	48.06	261.40	6.28	9.20	32	68	8.91	.29
December	10.88	22.6	2.46	47.77	223.70	5.35	7.81	32	69	7.73	.08
January	10.97	22.9	2.51	47.92	223.50	5.36	7.87	32	68	7.57	.30
February	11.15	20.8	2.32	47.87	212.50	5.09	7.41	31	69	7.34	.07
March	11.18	23.1	2.58	48.28	210.40	5.08	7.66	34	66	7.37	.29
April	11.18	23.4	2.62	47.97	222.00	5.32	7.94	33	67	7.72	.22
May	11.12	21.6	2.40	47.72	221.00	5.27	7.67	31	69	7.58	.09
June	11.31	21.3	2.41	48.08	200.90	4.83	7.24	33	67	7.13	.11
July	11.28	22.8	2.57	47.96	204.10	4.89	7.46	34	66	7.36	.10
August	11.07	20.8	2.30	47.80	202.25	4.83	7.13	32	68	6.94	.19
<b>1981/82</b>											
September											
October											
November											
December											
January											
February											
March											
April											
May											
June											
July											
August											

**Table 16—Soybeans, soybean meal, and soybean oil: Production, exports, and imports by major countries<sup>1</sup>**

Item/country	1977/78	1978/79	1979/80	1980/81 <sup>4</sup>	1981/82 <sup>5</sup>
	1,000 tons				
<b>Soybeans:</b>					
<b>Production</b>					
United States	48,097	50,859	61,722	48,772✓	57,331
Brazil	9,534	10,236	15,140	15,500✓	15,400
Argentina	2,700	3,700	3,650	3,600✓	4,100
China, Mainland	7,300	7,600	7,460	7,880✓	7,800
Other	4,530	5,011	5,722	5,563	6,088
Total	72,161	77,406	93,694	81,315	90,719
<b>Gross exports<sup>2</sup></b>					
United States	19,061	20,115	23,818	19,712✓	22,861
Brazil	830	638	1,239	1,900	1,500
Argentina	1,972	2,803	2,325	3,000	3,100
E.C. <sup>3</sup>	237	341	305	276	225
Other	412	781	758	926	1,041
Total	22,512	24,678	28,443	25,814	28,727
<b>Gross imports<sup>2</sup></b>					
E.C. <sup>3</sup>	11,129	12,007	12,085	10,920	11,600
Mexico	580	633	783	1,300	1,100
Japan	4,260	4,132	4,401	4,100	4,150
Spain	2,178	2,237	3,208	2,800	3,200
China, Mainland	188	261	810	500	450
China, Taiwan	959	1,111	939	900	950
Soviet Union	906	1,765	1,065	1,300	1,500
Eastern Europe	630	744	795	691	810
Other	2,226	3,110	3,812	5,502	5,679
Total	23,056	25,770	27,531	26,913	28,439
<b>Soybean meal.</b>					
<b>Production</b>					
United States	20,296	22,094	24,589	22,053	23,315
Brazil	7,652	7,451	8,134	10,670	10,700
Argentina	492	551	557	643	700
E.C. <sup>3</sup>	8,647	9,219	9,139	8,275	8,867
Mexico	780	712	1,016	1,170	1,283
Japan	2,542	2,647	2,693	2,554	2,690
Spain	1,728	1,787	2,425	2,208	2,480
China, Taiwan	618	676	648	597	623
Soviet Union	999	1,152	939	997	1,300
Eastern Europe	779	904	1,104	987	1,058
Other	5,170	5,691	6,260	6,473	6,647
Total	49,703	52,884	57,504	56,627	59,613
<b>Gross exports<sup>2</sup></b>					
United States	5,516	5,996	7,174	6,260	6,650
Brazil	6,311	5,447	5,409	8,600	7,800
Argentina	330	382	350	313	370
E.C. <sup>3</sup>	2,689	3,115	3,569	3,702	3,550
Other	403	537	862	745	765
Total	15,249	15,477	17,244	19,620	19,135
<b>Gross imports<sup>2</sup></b>					
E.C. <sup>3</sup>	7,833	8,430	9,418	9,951	9,722
Mexico	56	103	156	250	100
Japan	340	283	326	304	335
Spain	481	360	53	45	25
Soviet Union	0	52	500	1,200	1,500
Eastern Europe	3,170	3,490	3,921	3,930	4,202
Other	2,545	2,929	3,283	3,251	3,194
Total	14,425	15,647	17,657	18,931	19,078
<b>Soybean oil:</b>					
<b>Production</b>					
United States	4,666	5,136	5,491	5,084	5,339
Brazil	1,827	1,768	1,995	2,610	2,552
Argentina	103	118	119	137	149
E.C. <sup>3</sup>	1,895	2,052	2,004	1,810	1,967
Japan	598	621	618	591	627
Spain	385	398	540	498	560
China, Taiwan	142	147	141	130	136
Soviet Union	221	253	219	221	290
Eastern Europe	177	202	214	222	236
Other	1,106	1,199	1,376	1,485	1,556
Total	11,120	11,894	12,747	12,768	13,412
<b>Gross exports<sup>2</sup></b>					
United States	933	1,059	1,220	726	1,021
Brazil	675	557	533	1,250	925
Argentina	69	52	108	83	97
E.C. <sup>3</sup>	806	909	914	947	992
Spain	273	313	369	440	480
Other	34	75	126	134	140
Total	2,790	2,965	3,268	3,580	3,655
<b>Gross imports<sup>2</sup></b>					
E.C. <sup>3</sup>	449	455	488	645	579
India	510	555	690	625	690
Pakistan	181	260	213	260	260
China, Mainland	184	122	100	80	100
Mid-East/N. Afr.	506	544	643	571	635
Latin America	344	326	496	407	507
Other	425	416	644	809	803
Total	2,599	2,680	3,274	3,397	3,574

<sup>1</sup>Except for Argentina and Brazil, all data are shown on a local marketing year. For major bean producer/exporter countries, Northern Hemisphere marketing years begin in the late months of the first years shown and Southern Hemisphere marketing years begin in the early months of the second year. For bean importing countries, and for minor producing countries which are not major exporters, marketing years generally begin January 1 of the second year. For Argentina and Brazil, the October estimate is included in the total. <sup>2</sup>World exports will not necessarily equal imports due to differing marketing years and because some minor countries are not included in the totals. <sup>3</sup>European community includes Greece for 1980/81 analysis year on. <sup>4</sup>Preliminary <sup>5</sup>Estimated

Foreign Agricultural Service.

**Table 17—Cottonseed: Supply, disappearance, and price, U.S.**

Year beginning August 1	Supply			Disappearance				Price	
	Beginning stocks	Production	Total	Crush	Exports	Other	Total	Ending stocks	Average received by farmers
<i>1,000 short tons</i>									
1977	283	5,521	5,804	4,313	41	633	4,987	817	70.30
1978	817	4,269	5,086	4,127	16	423	4,566	520	114.00
1979	520	5,778	6,298	4,230	94	916	5,240	1,058	121.00
1980 <sup>1</sup>	1,058	4,471	5,529	4,076	133	921	5,130	398	129.00
1981 <sup>1</sup>	398	6,153	6,551	4,300	150	906	5,356	1,195	110.00

<sup>1</sup>Forecast.**Table 18—Cottonseed meal: Supply, disappearance, and price, U.S.**

Year beginning October 1	Supply			Disappearance				Price	
	Beginning stocks	Production	Imports	Total	Domestic	Exports	Total	Ending stocks	Average, Memphis
<i>1,000 short tons</i>									
1977	59	2,083	4	2,146	1,962	115	2,077	69	139.68
1978	69	1,885	9	1,963	1,762	150	1,912	52	164.80
1979	52	2,048	7	2,107	1,879	175	2,054	53	164.34
1980 <sup>1</sup>	53	1,857	—	1,910	1,680	130	1,810	100	200.00
1981 <sup>1</sup>	100	1,980	—	2,080	1,830	175	2,005	75	160.00

<sup>1</sup>Forecast.**Table 19—Cottonseed oil: Supply, disappearance, and price, U.S.**

Year beginning October 1	Supply			Disappearance				Price	
	Beginning stocks	Production	Total	Domestic	Exports	Total	Ending stocks	Average, Valley points	
<i>Million pounds</i>									
1977	86	1,453	1,539	696	758	1,454	85	25.4	
1978	85	1,282	1,367	620	661	1,281	86	31.6	
1979	86	1,423	1,509	660	728	1,388	122	25.3	
1980 <sup>1</sup>	122	1,238	1,360	535	745	1,280	80	25.9	
1981 <sup>1</sup>	80	1,375	1,455	545	810	1,355	100	24.0	

<sup>1</sup>Forecast.

**Table 20—Cottonseed: Supply, disappearance, and price, by months, U.S.**

Year beginning August 1	Supply		Disappearance		Price
	Beginning stocks	Crush	Exports	Ending stocks	Average received by farmers
	<i>1,000 short tons</i>				<i>Dol./ton</i>
1978/79					
August	816.7	311.6	6.3	668.0	84.00
September	668.0	253.9	3.8	614.0	97.20
October	614.0	348.3	.7	1,286.4	111.00
November	1,286.4	422.6	.2	1,666.9	117.00
December	1,666.9	391.9	.2	2,251.5	118.00
January	2,251.5	417.8	.4	2,173.1	119.00
February	2,173.1	403.6	1.0	1,919.5	118.00
March	1,919.5	425.5	.5	1,583.9	—
April	1,583.9	354.7	.4	1,276.7	—
May	1,276.7	325.2	1.0	975.8	—
June	975.8	255.1	1.1	721.0	—
July	721.0	216.5		520.2	—
Total		4,126.7	15.6		<sup>1</sup> 114.00
1979/80					
August	520.2	257.5	.2	380.1	125.00
September	380.1	174.6	.1	349.6	121.00
October	349.6	304.3	.3	1,157.4	125.00
November	1,157.4	394.3	.7	2,577.2	122.00
December	2,577.2	379.1	2.5	3,237.6	115.00
January	3,237.6	441.8	2.6	3,246.3	113.00
February	3,246.3	388.0	2.5	2,968.2	113.00
March	2,968.2	454.3	2.0	2,543.0	—
April	2,543.0	373.6	11.8	2,140.2	—
May	2,140.2	388.4	26.6	1,720.0	—
June	1,720.0	358.8	16.6	1,342.0	—
July	1,342.0	315.4	27.8	1,058.4	—
Total		4,230.1	93.7		<sup>1</sup> 121.00
1980/81					
August	1,058.4	330.3	34.8	811.9	110.00
September	811.9	306.1	35.8	610.0	120.00
October	610.0	364.9	34.0	1,171.9	124.00
November	1,171.9	426.0	4.8	1,658.7	133.00
December	1,658.7	400.4	9.1	1,904.5	132.00
January	1,904.5	439.8	2.6	1,754.9	126.00
February	1,754.9	378.2	.3	1,653.3	122.00
March	1,653.3	371.6	2.1	1,344.6	—
April	1,344.6	314.1	2.9	1,050.6	—
May	1,050.6	278.2	1.9	744.0	—
June	744.0	248.0	2.2	606.0	—
July <sup>2</sup>	606.0	218.2	2.1	397.5	—
Total		4,075.8	132.6		<sup>1</sup> 129.00
1981/82					
August <sup>2</sup>	397.5	177.1			111.0

<sup>1</sup>Weighted average. <sup>2</sup>Preliminary.

**Table 21 – Cottonseed meal: Supply, disappearance, price, by months U.S.**

Year beginning October 1	Supply			Disappearance			Price		
	Beginning stocks	Production	Imports	Total	Domestic	Exports	Total	Ending stocks	Bulk, Memphis
<i>1,000 short tons</i>									<i>Dol./ton</i>
<b>1978/79</b>									
October	69.0	162.4	—	231.4	178.7	4.1	182.8	48.6	164.00
November	48.6	197.1	—	245.7	174.3	17.2	191.5	54.2	166.25
December	54.2	184.3	—	238.5	176.5	2.8	179.3	59.2	167.50
January	59.2	197.5	—	256.7	199.1	11.3	210.4	46.3	169.50
February	46.3	193.1	—	239.4	154.6	31.9	186.5	52.9	161.90
March	52.9	201.2	1.8	255.9	176.3	4.0	180.3	75.6	156.90
April	75.6	166.5	—	242.1	132.8	10.5	143.3	98.8	141.25
May	98.8	155.7	5.8	260.3	129.0	4.2	133.2	127.1	143.00
June	127.1	122.2	.4	249.7	100.2	22.1	122.3	127.4	171.90
July	127.4	105.8	—	233.2	99.4	16.6	116.0	117.2	178.50
August	117.2	119.7	.8	237.7	127.7	13.5	141.2	96.5	173.75
September	96.5	79.3	.2	176.0	113.0	11.5	124.5	51.5	183.10
Total		1,884.8	9.0		1,761.6	149.7			164.80
<b>1979/80</b>									
October	51.5	145.9	.3	197.7	147.2	18.7	165.9	31.8	183.00
November	31.8	183.4	3.4	218.6	163.1	28.8	191.9	26.7	183.75
December	26.7	173.0	.1	199.8	165.4	6.8	172.2	27.6	195.00
January	27.6	201.0	—	228.6	199.0	1.1	200.1	28.5	167.00
February	28.5	178.0	—	206.5	161.4	22.2	183.6	22.9	156.25
March	22.9	204.0	2.9	229.8	176.0	12.7	188.7	41.1	136.25
April	41.1	168.9	—	210.0	144.0	26.2	170.2	39.8	120.50
May	39.8	181.6	—	221.4	134.4	18.1	152.5	68.9	121.00
June	68.9	167.8	—	236.7	129.9	16.6	146.5	90.2	129.40
July	90.2	148.5	—	238.7	156.2	10.2	166.4	72.3	157.00
August	72.3	152.3	—	224.6	148.1	7.2	155.3	69.3	198.40
September	69.3	144.0	—	213.3	154.4	6.4	160.8	52.5	224.50
Total		2,048.4	6.7		1,879.1	175.0			164.34
<b>1980/81</b>									
October	52.5	170.3	—	222.8	153.9	10.8	164.7	58.1	215.60
November	58.1	202.1	—	260.2	178.3	14.9	193.2	67.0	230.00
December	67.0	191.1	—	258.1	190.9	10.4	201.3	56.8	225.60
January	56.8	204.9	—	261.7	174.9	12.3	187.2	74.5	205.60
February	74.5	176.3	—	250.8	126.9	37.8	164.7	86.1	178.75
March	86.1	173.4	—	259.5	142.2	11.2	153.4	106.1	185.00
April	106.1	145.5	—	251.6	122.9	5.7	128.6	123.0	206.90
May	123.0	130.8	—	253.8	105.1	7.2	112.3	141.5	201.75
June	141.5	114.2	—	255.7	101.8	3.4	105.2	150.5	190.00
July <sup>1</sup>	150.5	104.2	—	254.7	100.3	4.1	104.4	150.3	182.50
August <sup>1</sup>	150.3	79.9	—	230.2	95.3	8.9	104.2	126.0	183.10
September	126.0								
Total									

<sup>1</sup>Preliminary.

**Table 22—Cottonseed oil: Supply, disappearance, and price, by months, U.S.**

Year beginning October 1	Supply			Disappearance			Price	
	Beginning stocks	Pro- duction, crude	Total	Domestic	Exports	Total	Ending stocks	Crude, Valley points
	<i>1,000 pounds</i>						<i>Cents/lb.</i>	
1978/79								
October	84,782	108,845	193,627	66,355	25,881	92,236	101,391	29.3
November	101,391	134,045	235,436	83,163	29,233	112,396	123,040	28.2
December	123,040	123,503	246,543	36,991	82,462	119,453	127,090	28.2
January	127,090	134,354	261,444	52,610	56,672	109,282	152,159	28.3
February	152,159	127,991	280,150	55,993	71,232	127,225	152,925	32.1
March	152,925	135,292	288,217	57,304	89,875	147,179	141,038	33.8
April	141,038	115,002	256,040	61,720	51,255	112,975	143,065	33.2
May	143,065	103,740	246,805	53,300	52,540	87,768	140,965	31.6
June	140,965	86,289	227,254	24,623	63,145	87,768	139,486	32.6
July	139,486	73,774	213,260	32,600	63,755	96,355	116,905	35.2
August	116,905	85,513	202,418	67,205	18,060	85,265	117,153	33.9
September	117,153	53,516	170,669	27,719	56,558	84,277	86,392	33.3
Total		1,281,864		619,583	660,668			31.6
1979/80								
October	86,392	98,562	184,954	57,794	34,034	91,828	93,126	30.2
November	93,126	126,509	219,635	41,725	48,920	90,645	128,990	27.9
December	128,990	119,910	248,900	77,661	26,956	104,617	144,283	26.8
January	144,283	142,848	287,131	79,158	34,821	113,979	173,152	24.2
February	173,152	125,678	298,830	71,912	28,059	99,971	198,859	24.8
March	198,859	145,109	343,968	20,718	110,478	131,196	212,772	22.4
April	212,772	119,837	332,609	72,962	70,989	143,951	188,658	20.4
May	188,658	125,545	314,203	43,355	105,017	148,372	165,831	20.9
June	165,831	116,775	282,606	84,124	31,373	115,497	167,109	22.3
July	167,109	104,237	271,346	56,451	70,338	126,789	144,551	27.8
August	144,551	104,934	249,485	33,212	77,642	110,854	138,631	29.0
September	138,631	93,068	231,699	20,464	89,303	109,767	121,932	27.5
Total		1,423,012		659,536	727,930			25.3
1980/81								
October	121,932	116,372	238,304	62,035	53,690	115,725	122,579	27.2
November	122,579	130,453	253,032	33,565	66,610	100,175	152,857	27.8
December	152,857	122,277	275,134	57,934	47,122	105,056	170,078	26.8
January	170,078	131,708	301,786	41,181	77,033	118,214	183,572	25.3
February	183,572	118,928	302,500	73,174	29,251	102,425	200,075	24.2
March	200,075	115,388	315,463	46,411	66,657	113,068	202,395	25.3
April	202,395	100,759	303,154	55,131	82,132	137,263	165,891	27.3
May	165,891	88,665	254,556	22,197	72,195	94,392	160,164	26.7
June	160,164	77,365	237,529	30,102	85,680	115,782	121,747	26.6
July <sup>1</sup>	121,747	69,565	191,312	31,391	46,856	78,247	113,065	27.9
August <sup>1</sup>	113,065	57,711	170,776	24,337	35,907	60,244	110,532	24.6
September <sup>1</sup>	110,532							20.7
Total								25.9

<sup>1</sup>Preliminary.

**Table 23—Sunflower seed: Supply, disappearance, and price**

Year beginning September 1	Supply				Disappearance				Price	
	Beginning stocks	Pro- duction	Imports	Total	Crush	Non- oil usage + seed	Exports	Total	Ending stocks	Average received by farmers
	<i>1,000 metric tons</i>									
1976	—	463	2	465	35	70	337	442	23	243.00
1977	23	1,330	3	1,356	219	118	942	1,279	77	224.00
1978	77	1,823	7	1,907	292	159	1,366	1,817	90	236.00
1979	90	3,484	10	3,584	547	137	1,820	2,511	1,073	200.00
1980	1,073	1,786	28	2,887	733	112	1,500	2,357	530	240.00
1981	530	2,145	25	2,700	900	146	1,400	2,456	250	255.00

**Table 24—Sunflower meal: Supply, disappearance, and price**

Year beginning October 1	Supply			Disappearance			Price	
	Beginning stocks	Pro- duction	Total	Domestic	Exports	Total	Ending stocks	Average
	<i>1,000 metric tons</i>							
1976	—	21	21	—	—	21	—	—
1977	—	134	134	—	—	134	—	—
1978	4	180	184	180	—	180	4	136.00
1979	4	359	363	359	—	359	4	100.00
1980	4	410	414	410	—	410	4	125.00
1981	4	540	544	540	—	540	4	110.00

**Table 25—Sunflower oil: Supply, disappearance, and price**

Year beginning October 1	Supply			Disappearance			Price	
	Beginning stocks	Pro- duction	Total	Domestic	Exports	Total	Ending stocks	Average
	<i>1,000 metric tons</i>							
1976	8	14	22	7	15	22	—	243.00
1977	—	86	86	49	34	83	3	—
1978	3	115	118	70	41	111	7	728.00
1979	7	224	231	96	86	182	49	560.00
1980	49	281	330	15	290	305	25	600.00
1981	25	360	385	60	300	360	25	640.00

**Table 26—Prices: Wholesale, farm, and index numbers of wholesale prices**

Item	1981				
	May	June	July	Aug.	Sept.
Wholesale prices, cents per pound, for fats and oils					
Butter, creamery, grade A, (92 and 93-score) bulk, New York	176.0	176.3	176.4	176.4	
Castor oil, No. 1, Brazilian, tanks, imported, New York	44.6	44.1	43.5	44.3	43.7
Coconut oil, crude, tank cars, Pacific Coast	26.0	27.4	28.1	26.4	24.3
Corn oil, crude, tank cars, f.o.b., Decatur	24.4	24.5	25.8	22.3	
Cottonseed oil, crude, tank cars, f.o.b., Valley	26.7	26.6	27.9	24.6	20.7
Grease, white, tank cars, delivered, Chicago	18.0	17.8	17.5	19.0	
Linseed oil, raw, tank cars, Minneapolis	32.6	32.8	32.8	32.3	31.8
Margarine, yellow, quarters, f.o.b., Chicago	36.6	37.7	39.4	39.0	37.4
Palm kernel oil, c.i.f., bulk, U.S. ports	42.8	42.8	42.8	42.8	42.8
Palm oil, c.i.f., bulk, U.S. ports	27.6	29.4	28.4	25.0	24.7
Peanut oil, crude, tank cars, f.o.b., Southeast mills	37.1	38.0	38.1	43.2	40.3
Rapeseed oil, refined, denatured, tanks, New York	59.0	59.0	59.0	59.0	59.0
Safflower oil, tanks, New York	46.5	46.5	46.5	46.5	72.5
Shortening, all vegetable, hydrogenated, 440-pound drums, New York	44.5	42.8	46.0	44.0	
Soybean oil, crude, tank cars, f.o.b., Decatur	21.6	21.3	22.8	20.8	19.4
Tallow, edible, loose, Chicago	30.2	30.1	30.9	33.7	
Tallow, inedible, number 1, delivered, Chicago	16.6	16.0	15.2	15.0	14.5
Tung oil, imported, drums, f.o.b., New York	62.9	64.5	64.0	64.0	62.1
Prices received by U.S. farmers					
OILSEEDS:					
Cottonseed, United States average (short ton)	—	—	—	111.00	100.00
Flaxseed, United States average (bushel)	7.65	7.47	7.23	7.08	6.39
Peanuts, United States average (cents per pound)	—	—	—	32.60	30.60
Soybeans, No. 1, yellow, Chicago (bushel)	7.53	7.09	7.28	6.95	6.50
Soybeans, United States average (bushel)	7.42	7.10	7.16	6.71	6.29
Sunflower seed, United States average (cwt.)	11.80	11.50	11.30	11.20	10.10
OILMEALS (bulk-short ton)					
Cottonseed meal, 41 percent protein, Memphis	201.75	190.00	182.50	183.10	
Linseed meal, 34 percent protein, Minneapolis	155.00	153.80	145.00	150.00	
Peanut meal, 50 percent protein, f.o.b. Southeastern mills	—	—	198.20	—	
Soybean meal, 44 percent protein, Decatur	221.00	200.90	204.10	202.25	
Soybean meal, 49-50 percent protein, Decatur	237.50	221.90	222.60	220.25	
Sunflower meal, 28 percent protein	122.50	99.00	90.00	102.50	
Index numbers of wholesale prices, fats and oils, 1967=100					
All fats and oils	288	283	289	290	
All fats and oils, except butter	322	316	323	324	
Group by origin:					
Animal fats	263	257	261	265	
Vegetable oils, domestic	138	152	163	156	
Vegetable oils, foreign	229	228	232	215	
Group by use:					
Butter	221	221	222	222	
Lard, refined	263	263	263	300	
Food fats other than butter	216	212	220	218	
Food fats other than butter and lard	153	154	166	155	
All edible fats and oils	208	204	211	210	
Soap fats	322	326	313	329	
Drying oils	189	192	190	190	
Other industrial:					
All industrial	300	303	292	305	
Crude	187	186	199	187	
Edible vegetable oils, grouped by degree of processing:					
End products	239	237	240	238	
Refined	208	213	222	197	
Margarine	235	235	235	235	
Shortening, 3-pound tin	266	266	266	266	
Shortening, 440-pound drum	214	206	222	266	

Compiled from Chemical Market Reporter, Wall Street Journal, Feedstuffs, Reports of the Crop Reporting Board, Agricultural Marketing Service, and Bureau of Labor Statistics.

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FOS-305

October 1981

Weights and Measures

1 short ton = 2,000 pounds

1 metric ton = 2,204.622 pounds

1 short ton = .907185 metric tons

1 metric ton = 1.102311 short tons

1 acre = .404694 hectares

1 hectare = 2.4710 acres

60-pound bushel of soybeans

1 bushel = .03 short ton

1 short ton = 33.333 bushels

1 bushel = .0272155 metric ton

1 metric ton = 36.7437 bushels

56-pound bushel of flaxseed

1 bushel = .028 short ton

1 short ton = 35.714 bushels

1 bushel = .0254 metric ton

1 metric ton = 39.368 bushels