

Food and Agriculture — Current Situation and Prospects for 1982

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THIS article is largely a summary of the United States food and agricultural outlook for 1982 as discussed at the Annual National Agricultural Outlook Conference in November 1981. The overall outlook for this year is for increased production and lower prices for most farm products. Retail food prices, which rose about 8 percent last year, are likely to rise at an even slower rate in 1982.

In addition to the prospective impact of larger farm commodity supplies, agricultural prices will also be affected by a slowing in the growth of overall food demand this year. Restrictive domestic monetary policies designed to reduce inflation will tend to reduce the growth in domestic demand. Similar restrictive monetary policies in a number of foreign countries point to a sluggish foreign demand for U.S. farm products.

Despite the expected relatively low prices of farm products and the rising farm production costs, the quantities of most commodities available, such as cereals and bakery products, beef and veal, and fresh fruits and vegetables, are likely to rise further in 1982. A record 1981 feed grain crop boosted 1981-82 feed grain supplies to 280.1 billion tons, 11 percent above last year. Large feed grain supplies and lower feed prices will induce farmers to maintain livestock production at a relatively high level. Wheat and rice

supplies are at record levels and a large potato crop was harvested. Of the major crops, only the 1981 fruit crop was somewhat smaller than a year ago. Thus, the overall farm and food outlook for this year is for increased output of farm products, especially livestock products, and relatively large food supplies.

Net farm income after inventory adjustments rose in 1981 to about \$22 billion or about \$2 billion above the 1980 total. Net income in 1982 will be determined chiefly by returns on crops to be planted later this year. However, it may decline from last year's level, especially if there are further increases in crop inventories in the 1982-83 crop year.

OUTLOOK FOR AGRICULTURE

Economic conditions in the farm sector in 1982 are likely to change very little from 1981, especially for the next several months. The supply of farm products relative to demand is expected to remain relatively high and, despite further overall inflation, farm commodity prices will probably increase little, if any. Production expenses, while rising at a slower rate than a year ago, are expected to continue to increase, resulting in little change in net cash receipts through mid-year.

The success of 1982 crops, however, will be a major factor in determining conditions in the last half of the year. Because the demand for crops is relatively inelastic in the short run, another large crop will result in a further decline in relative prices of farm products and lower real farm income. A small crop, however, could lead to an increase in farm prices and incomes.

Recent Production and Price Movements

To some extent, the overall outlook for food and agriculture this year is related to the relative prices of these commodities vs. other commodities. This relationship is clearly observable in the growth rates of crop and livestock production during recent decades. Production of all farm products in the United States rose at about 2.5 percent per year through the 1970s, following a relatively slow growth rate of about 0.6 percent per year in the last half of the 1960s (table 1). The higher growth rate for farm products in the 1970s followed relatively higher farm product prices, especially in the first half of the decade.

During the 1965-70 period, the price of all farm products rose on average only 2.4 percent per year, compared with an average increase of 4.2 percent per year for the consumer price index. This decline in relative price of farm products, especially for crops, reduced the incentives for production.

The increase in export demand for farm products in the early 1970s, coupled with the reduced stocks of crops held by the government in price support operations, led to a sharp turnaround in the prices of farm products compared with general prices. During the 1970-75 period, the average prices of all farm products rose sharply (11 percent per year) and production quickly increased in response. Overall farm output, as shown in table 1, rose at a 2.45 percent rate in the first half of the 1970s, compared with a 0.6 percent rate during the previous five years.

Crop production growth was greater than livestock production during the 1970s, reflecting the relatively larger rise in crop prices, especially during the first half of the decade. During the 1970-75 period, crop production rose at a 3.89 percent rate compared with -0.77 percent for livestock production. In contrast, during the last half of the 1960s, livestock output increased at a 2.02 percent rate compared with a 0.20 percent rate of increase for crops.

The government held large inventories of crops acquired in price support operations during the

Table 1
Rates of Change of Production and Prices of Farm Products

| | Percent changes, annual rates ¹ | | |
|-------------------|--|---------|---------|
| | 1965-70 | 1970-75 | 1975-81 |
| Prices | | | |
| All farm products | 2.4% | 11.0% | 5.5% |
| Livestock | 4.7 | 7.8 | 6.7 |
| Crops | -0.6 | 15.0 | 4.5 |
| Consumer prices | 4.2 | 8.0 | 8.0 |
| Production | | | |
| All farm products | 0.60 | 2.45 | 2.47 |
| Livestock | 2.02 | -0.77 | 2.04 |
| Crops | 0.20 | 3.89 | 3.41 |

¹Beginning year average to ending year average.

SOURCE: U.S. Department of Agriculture, *Agricultural Statistics* (1980), and *Agricultural Outlook* (1981).

1960s. As inflation accelerated in the late 1960s, however, government price supports for these products failed to keep pace with general inflation, and government-held stocks were reduced. The value of farm commodities owned by the government (largely crops) declined from \$4.1 billion at the end of 1965 to \$1.6 billion at the end of 1970.¹ Partly as a result of this reduction in government stocks, crop prices declined both in nominal terms (-0.6 percent per year) and relative to other prices.

Following the sharp increase in exports (largely crops) and the decline of stocks in the early 1970s, crop prices rose at a 15 percent rate and livestock product prices at a 7.8 percent rate.² During this period, the annual rate of inflation as measured by the consumer price index was 8.0 percent. A sizable change in the relative production of crops and livestock followed: Crop output rose at a 3.89 percent rate while livestock output declined at a 0.77 percent rate. This decline reflected the higher-priced feed and the slower growth in demand for livestock products.

During more recent years, 1975-81, the growth rate of export demand for crops has declined, and agricultural prices, which remained relatively high

¹U.S. Department of Agriculture, *Agricultural Statistics* (1980).

²For an analysis of the rise in export demand, see Clifton B. Luttrell, "Rising Farm Exports and International Trade Policies," this *Review* (July 1979), pp. 3-10.

into the last half of the decade, now have declined relative to other prices. Growth in the average price of all farm products decelerated during the 1975-81 period to a 5.5 percent rate compared with the general inflation rate of 8 percent as measured by the consumer price index. The price of livestock products, however, rose at a faster rate than crops, and livestock production accelerated somewhat from the 1970-75 rate. Nevertheless, partly as a consequence of the favorable 1981 weather, crop output rose at a faster rate than livestock output.

Incentive for Farm Production

Agricultural prices in late 1981 were relatively low when compared with the general price level. For example, late in the fourth quarter, farm product prices were 8 percent below levels of a year earlier and only 26 percent above their 1977 average. In contrast, the consumer price index was about 10 percent above a year earlier and 54 percent above its 1977 average. Moreover, prices paid by farmers for production items were about the same as a year earlier and 46 percent above the 1977 average.

While there is less incentive for increased overall farm production this year than last, supply and demand factors are more encouraging for livestock producers than for crop producers. Large feed supplies and accompanying relatively low feed prices mean lower feed cost for livestock producers and, consequently, some improvement in livestock returns relative to those for crops. Average crop prices in the fourth quarter of 1981 were down 15 percent from a year earlier, while livestock prices were down only 10 percent.³ Similarly, a comparison of recent prices with the average for 1977 shows that, during this period, the average price of livestock products rose 33 percent while that of crops increased only 19 percent.

Meat Animals and Poultry

A relatively high level of meat and poultry production is expected later this year following a slight reduction in output during the first quarter.

Beef production is likely to increase 2 percent to 4 percent. The slaughter of nonfed cattle is ex-

pected to remain large, and placements of cattle in feedlots are likely to expand from the relatively low number currently on feed.

Although *pork* production in early 1982 will likely be greater than was projected last autumn, slaughter for the year is expected to be 4 percent to 6 percent less than a year ago. Based on intended farrowings, however, the slaughter level in late 1982 may equal that of late 1981.

Despite the more favorable feed prices this year, *broiler* producers are planning only a small expansion for 1982. This follows an 11 percent increase last year, when sizable losses were incurred on much of the output as the larger than expected pork supplies depressed poultry prices.⁴ Broiler output will likely continue above 1981 levels in the first part of this year but may decline to 1981 levels in the fourth quarter. Turkey production in 1982 is likely to be lower than 1981 production as a result of reduced prices and relatively low net returns last year.

Given the prospective supply of and demand for meat and poultry, 1982 average prices of these products are not expected to greatly exceed the average of 1981. Choice beef prices are expected to increase only moderately through the first half of the year and may average only 1 percent to 2 percent above the range of the past two years. Hog prices in the first half of the year are expected to average about 10 percent above the 1981 level but are likely to be only moderately higher in the second half of the year. Broiler prices are expected to average slightly higher than last year, lower in the first half and higher in the second. Turkey prices are expected to rise to about 70 cents per pound in the second half of the year, up from 55-56 cents per pound in late 1981.

Dairy Products and Eggs

Reflecting the relatively high government price supports (\$13.10 per hundredweight (cwt.) for 3.67 percent milk) and lower feed prices, milk production is expected to increase, at least in the first half of 1982. The U.S. Department of Agriculture projects that dairy output may decline from year-earlier levels in the second half of the year, but equal last year's output for the year as a whole. An industry report given

³U.S. Department of Agriculture, *Agricultural Outlook* (December 1981).

⁴Pork is a good substitute for poultry. Hence, with large pork supplies and relatively low pork prices, consumers tend to substitute pork for poultry in their diets. This results in reductions in the demand for and price of poultry as well.

at the outlook conference, however, points to a further rise in milk production of 2 percent from the record 1981 level.⁵

In either case, production of dairy products is expected to exceed domestic consumption plus exports in the first half of 1982, which will result in further additions to government stocks through price support operations. Government purchases in price support operations on a milk equivalent basis totaled about 11 percent of production in the first three quarters of 1981 and such purchases will remain large. Industry estimates of the cost to taxpayers of such purchases are as high as \$2.5 billion. Milk prices for all of 1982 are expected to average about 1 percent above 1981. With favorable feed costs in prospect, dairy farmers should realize higher net returns.

Egg producers have been reducing the number of replacement pullets as a result of unfavorable price relationships since early 1980. Egg production, however, has been maintained by producers keeping their hens in production longer. Production in late 1981 was down slightly from 1980 levels, and may continue below year-earlier levels through mid-1982. With somewhat higher egg prices in prospect, production is likely to rise in the second half of the year and equal last year's level for the entire year. Egg prices are expected to average about 74 cents per dozen for the year, up from 70 cents per dozen in 1981.

Crops

As a result of record crops of wheat, coarse grain and rice this marketing year, world supplies of most crops are well above their 1980/81 levels. These larger supplies have led to lower average prices and less incentive for production growth in 1982. Nevertheless, weather is a major factor in crop production, and weather conditions as the crop develops will be a major factor in determining both the size of the 1982 crop and the average prices received by farmers.

Food Grains (Wheat and Rice)

The 1981 record *wheat* crop of 2.75 billion bushels, up 16 percent from 1980, combined with a relatively large June 1981 carryover, provides a 1981/82 market supply of 3.74 billion bushels. This is 14 percent above the previous record of 1980/81.

Export demand for U.S. wheat is expected to rise as a result of relatively small crops in the Soviet Union and Eastern Europe. Wheat exports are projected at a record 1.9 billion bushels, up from 1.5 billion last year and an average of 1.05 billion for the 1970/79 decade. Increased shipments are in prospect to the Soviets, India, Brazil, Iran and Morocco, but China is expected to remain the largest U.S. wheat customer. Hence, the average farm price for 1981/82 wheat may remain near that of last year, despite the increased short-run supply.

Stocks of wheat at year-end are expected to be down to about 908 million bushels from 991 million bushels last year, reflecting the increased exports. Nevertheless, the Secretary of Agriculture last September announced plans to implement a reduced acreage program for the 1982 wheat crop.

Rice production in 1981 was estimated at 178.8 million cwt., 12 percent above the prior 1980 record level. This plus carryover stocks results in a total rice supply of 195.4 million cwt. for the 1981/82 marketing year, or 14 percent more than the previous 1980/81 record.

Rice exports for 1981/82 are projected at 79.0 million cwt., down from 91.4 million last year, with domestic use at 56.5 million cwt., up 3.8 percent from last year. Hence, year-end stocks are likely to total 55 million to 60 million cwt., well above last year's carryover.

Because of record production, carryover stocks and the expected decline in export demand, the season-average price of rice is expected to decline to about \$10 per cwt., \$2 per cwt. below last year's price. Hence, with a target price (below which deficiency payments are made to eligible farmers) of \$10.68 per cwt. in effect, deficiency payments by the government to eligible producers are expected.

Feed Grains (Corn, Oats, Barley, Sorghum Grain)

The U.S. feed grain supply of 280.2 million metric tons is about 10 percent more than a year ago. A record crop of 245 million tons, 3 percent above the previous 1979 record crop and 24 percent above the 1980 crop, was produced. Corn production, about four-fifths of total feed grain, was up 22 percent.

With the large crop, the supply of feed grain increased faster than demand, and the price declined. Corn prices are expected to average only about

⁵E. Linwood Tipton, *Dairy Outlook, Production Consumption Estimates 1982* (Government Printing Office).

Table 2
Changes in Per Capita Consumption of Major Food Products

| Food Group | 1980 consumption in pounds (retail weight) | Percent change in | | | | |
|------------------------------------|--|-------------------|-------|-------|-----------------------|--------------------|
| | | 1978 | 1979 | 1980 | 1981 (Preliminary) | 1982 (Forecast) |
| All foods | 1408 | -0.4% | 0.8% | -0.9% | -1.4% | 1% |
| Cereals and bakery products | 150 | -1.1 | 3.8 | -0.5 | 0.7 | 1 |
| Beef and veal | 78 | -5.7 | -10.9 | -2.3 | 0.4 | 2-3 |
| Pork | 68 | 0.2 | 14.1 | 7.1 | -7.0 | -6 |
| Poultry | 61 | 4.7 | 8.4 | 0.2 | 2.0 | 0 |
| Eggs | 35 | 1.8 | 2.0 | -2.0 | -3.4 | -2 |
| Dairy products | 308 | 0.4 | -0.6 | -3.0 | 0.0 | 1 |
| Fresh fruits | 84 | -1.8 | 3.4 | 4.0 | -3.0 | 1 |
| Fresh vegetables | 207 | -0.7 | 1.9 | 0.9 | -3.0 | 5 |
| Processed fruits and vegetables | 142 | 0.9 | 1.5 | -2.8 | -1.5 | -5 |
| Sugar and sweets | 133 | 0.7 | 1.5 | -2.7 | -2.0 | 1-2 |
| Fats and oils | 55 | 3.4 | 2.5 | 0.4 | -0.8 | 1-2 |
| Nonalcoholic beverages | 11 | 7.7 | 3.7 | -5.0 | 3.6 | 1 |

SOURCE: U.S. Department of Agriculture, *The Current Food Situation and Outlook for 1981*.

\$2.60-\$2.90 per bushel for the year, down from about \$3.10 per bushel last year.

Exports are likely to be up somewhat, 74 million metric tons compared with 69 million in 1980/81, and domestic use may increase from 147 million to 156 million metric tons. Nevertheless, a 50 million metric ton carryover is estimated for this year, well above the 35 million last year.

Fats and Oils (Soybeans and Cottonseed)

Soybean production of 2.1 billion bushels last year was 415 million bushels more than in 1980. Coupled with relatively large beginning stocks, the total quantity available for 1981/82 was boosted to 2.4 billion bushels. This is 13 percent above a year ago and only 1 percent below the record 1979/80 level. With the large supply available and no major increase in demand, prices to farmers have declined from year-ago levels and are expected to average from \$5.50 to \$7.00 per bushel for 1981/82, well below the \$7.61 estimated for 1981.

Cottonseed production may reach a record 6.2 million short tons. When added to last year's very small carryover of 0.4 million short tons, supplies this year will total a relatively large 6.6 million short tons. Prices for cottonseed averaged \$105.50 a ton during the early autumn or \$10 per ton less than a

year earlier. The season average price is forecast at \$110 a ton, 12 percent less than last year, due to the relatively large supply of cottonseed and soybeans, which is a good substitute for cottonseed.

Cotton

The relatively large 1981 cotton crop of 15.5 million bales (480 pounds per bale) plus a 2.7 million bale carryover provides 18.2 million bales for domestic consumption and export during 1981/82. With domestic cotton consumption estimated at 6.2 million bales and exports at 7.0 million bales, carryover stocks at the end of 1981/82 are projected to be relatively high at 5.0 million bales.

Cotton producers receive a deficiency payment by the government if the 1981 calendar year average price of upland cotton is less than the target price of 70.87 cents per pound. Such deficiency payments may be relatively large for the 1981 crop as the September price for upland cotton was only about 63 cents per pound.

Tobacco

Tobacco production in 1981 was estimated at 2.01 billion pounds, up 13 percent from a year earlier. The large crop and some increased carryover indi-

Table 3
Changes in the Consumer Price Index of Food

| Component | Relative importance in food CPI | Percent change in | | | | |
|---------------------------------|---------------------------------|-------------------|-------|------|--------------------|-----------------|
| | | 1978 | 1979 | 1980 | 1981 (Preliminary) | 1982 (Forecast) |
| Food | 100.0% | 10.0% | 10.9% | 8.6% | 8.2% | 7% |
| Food away from home | 30.7 | 9.0 | 11.2 | 9.9 | 9.3 | 8 |
| Food at home | 69.3 | 10.5 | 10.8 | 8.0 | 7.8 | 6 |
| Cereals and bakery products | 8.7 | 8.9 | 10.1 | 11.9 | 10.2 | 7-8 |
| Beef and veal | 9.8 | 22.9 | 27.3 | 5.7 | 1.8 | 5-7 |
| Pork | 4.7 | 12.9 | 1.5 | -3.4 | 9.8 | 8-11 |
| Other meats | 3.0 | 17.8 | 14.7 | 3.8 | 5.0 | 6-7 |
| Poultry | 2.3 | 10.3 | 5.0 | 5.1 | 5.5 | 3-5 |
| Fish and seafood | 2.3 | 9.5 | 9.8 | 9.2 | 8.9 | 8-9 |
| Eggs | 1.3 | -5.5 | 9.5 | -1.8 | 7.8 | 4-5 |
| Dairy products | 9.3 | 6.7 | 11.6 | 9.8 | 7.5 | 4-5 |
| Fresh fruits | 2.4 | 19.4 | 12.4 | 6.2 | 5.3 | 8-9 |
| Fresh vegetables | 2.8 | 7.9 | 2.9 | 8.9 | 20.1 | -1-0 |
| Processed fruits and vegetables | 4.5 | 10.5 | 8.6 | 7.0 | 12.2 | 9-10 |
| Sugar and sweets | 2.9 | 12.2 | 7.8 | 22.9 | 8.2 | 2-3 |
| Fats and oils | 1.9 | 9.5 | 8.0 | 6.6 | 11.5 | 5-6 |
| Nonalcoholic beverages | 7.6 | 5.7 | 5.0 | 10.6 | 4.1 | 2-3 |
| Other prepared foods | 5.8 | 8.0 | 10.1 | 10.8 | 10.5 | 9-10 |

SOURCE: U.S. Department of Agriculture, *The Current Food Situation and Outlook for 1981*.

cate that total supplies for the 1981/82 marketing year will be about 5 percent larger than a year ago. Government price support levels for tobacco are 12 percent higher than a year ago so that cash receipts to farmers from sales of the 1981 crop are up about 25 percent. The formula for government price supports for eligible tobacco requires that the support price for the 1982 crop be increased 11 percent from the 1981 level. Thus, with an average tobacco harvest, cash returns from tobacco sales will rise 11 percent.

FOOD OUTLOOK

Led by sizable gains in the output of fresh vegetables, beef and veal, overall food supplies this year are forecast sufficiently high to provide a 1 percent increase in consumption per capita. Increases are also in prospect for cereals and bakery products, dairy products, and fresh fruit (table 2). Some reduction in consumption per capita is in prospect for pork, eggs, and processed fruit and vegetables.

Crude foodstuff prices are not expected to rise much at the farm level this year, only about 1 percent

to 4 percent. As indicated earlier, beef, poultry, dairy product and egg price increases will be minimal. If hog production declines relative to demand as expected, pork price increases may equal the inflation rate. Fresh fruit prices may also rise at the inflation rate. Farm level prices for most cereals and dry edible beans, however, will be lower than in 1981. Consequently, most of the increase in food costs this year will occur in the processing and marketing sector.

The average price increase for food at grocery stores is estimated to be about 6 percent (table 3). No major price changes are forecast for any food group. Price increases for pork, processed fruit and vegetables, and other prepared foods such as cereals and bakery products, where most of the costs represent processing and marketing services, will likely approach the rate of inflation.

SUMMARY

The U.S. Department of Agriculture forecasts that there will be no improvement in net farm incomes

in 1982. Expectations are for rising food supplies and relatively moderate food price increases.

Abundant quantities of most farm products are available for domestic use and export following the record 1981 crop harvest. While exports are expected to rise further, supplies of most crops and livestock products will be sufficient to limit price increases to less than the rate of inflation. Cash

receipts to farmers could be down from \$1 billion to \$3 billion and the decline in net income could be greater.

Larger quantities of food are in prospect for consumers, and the food component of the consumer price index will likely increase at less than the rate of inflation.

