



**AgEcon** SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

---

# 1980 AGRICULTURAL OUTLOOK

---

Papers Presented at the Agricultural Outlook Conference  
Sponsored by the U.S. Department of Agriculture—  
Held in Washington, D.C., November 5-8, 1979

---

PREPARED FOR THE  
COMMITTEE ON AGRICULTURE, NUTRITION,  
AND FORESTRY  
UNITED STATES SENATE

---

DECEMBER 23, 1979



U.S. DEPT. OF AGRICULTURAL  
NATIONAL AGRICULTURAL LIBRARY

APR 28 1980

CATALOGING = PREP.

Printed for the use of the  
Committee on Agriculture, Nutrition, and Forestry

---

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1979

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.

## U.S. AGRICULTURAL OUTLOOK IN WORLD PERSPECTIVE

(By J. Dawson Ahalt, Chairman, World Food and Agricultural Outlook and Situation Board, U.S. Department of Agriculture)

### OVERVIEW

The world is more interdependent today than it ever has been. Few sectors of our economy demonstrate this relationship more clearly than agriculture. That interdependence, and the U.S. role in it, will continue to grow in 1980 and the years that follow.

#### *Agriculture in the 1970's*

Despite the economic turmoil of the 1970's, the world made considerable progress in upgrading diets during the decade. Consumption of grains advanced at an average rate of 2½ percent per year, compared with an average annual gain of more than 3 percent during the more stable 1960's. Consumption of oilseeds during the current decade accelerated to nearly a 6½-percent annual rate, mainly in response to increased worldwide demand for meat, milk, and eggs.

This improvement in global diets demonstrates the close interrelationships of world agriculture. In fact, without sharp increases in the trade of agricultural commodities, gains in world consumption could not have occurred. The future points to the continued increases in world agricultural trade that will enable mankind to eat better.

During the 1970's, the volume of world grain and oilseed trade nearly doubled—an annual growth rate of around 6 percent. The U.S. share of global grain exports climbed from 35 percent to nearly 60 percent during that time, while the Soviet Union became a leading importer. The United States maintained its share of world oilseed trade at about 55 percent during the 1970's, while Brazil and Argentina tripled their shares.

Clearly the world agricultural setting is far different now, at the outset of the 1980's, than it was a decade ago. Then, a counterpart of mine stood here to predict U.S. agricultural exports that might for the first time exceed \$6 billion in 1969-70. He also forecast a farm income level of \$16 billion and a "substantial" food price increase of 3.5-4 percent, compared with the "sharp" 5-percent increase of 1969. How different the world seemed then.

Before moving to the outlook for U.S. and world agriculture for 1980, it might be useful to contrast the agriculture of the 1970's with that of the 1960's. Papers that will be delivered tomorrow, by Howard Hjort, Turner Oyloe, and others will look ahead to the policy and trade issues we might anticipate further along in the 1980's.

After hovering close to loan-rate levels in much of the 1960's, grain prices rose sharply in the early 1970's as global supplies tightened. During the 1960's, there had been no major year-to-year drop in global

grain production. However, from 1972-73 to 1979-80, world grain output has fallen four times. Soviet grain production became more erratic in the 1970's as additional area came under cultivation. The Soviets' net grain trade shifted from net exports of 6 million tons in 1970-71 to net imports of 25 million tons in the poor crop year of 1975-76. Soviet grain imports are projected at 32 million tons in 1979-80.

While rising grain prices in the 1970's caused a cutback in livestock feeding in the United States, and Soviet grain consumption was limited in poor crop years by import capacity, the rest of the world continued to consume grain at unprecedented levels. For the world excluding the United States and the U.S.S.R., there were no year-to-year declines in grain usage from 1969-70 to 1979-80. This strong world demand pulled food grain stocks to unusually low levels in the midseventies. By 1975-76, grain stocks had fallen to about 135 million tons, down from 207 million at the beginning of 1970-71. The ratio of stocks to use—a key price determining factor—dropped to nearly 10 percent during this period compared with 16 percent in the late 1960's.

Although other farm commodity prices rose sharply during this period, the boost to producer returns was short lived. The U.S. livestock sector earned higher returns in early 1973, but domestic price controls, rising oil prices, and a slowdown in economic activity in a number of the high-income market economies soon brought herd liquidation and depressed livestock prices. As output expanded in response to the runup in prices in the midseventies world agricultural commodity prices dropped to a low in 1977. By 1978 and early 1979, changes in agricultural policies in the United States and a recovery of world economic activity had strengthened farm product prices, with grain prices again on the upswing.

The effects of these supply and price fluctuations on the U.S. economy, within and outside the agricultural sphere, are well known:

Yearly increases in U.S. retail food prices had averaged 2.5 percent during the 1960's. During the 1970's increases averaged 8 percent per year, including 14 percent jumps in 1972 and 1974.

U.S. net farm income rose from \$17.8 billion in 1972 to nearly \$30 billion in 1973; dropped to \$21 billion in 1974 and remained at that level, or lower, for 2 more years; then recovered in 1978 and 1979.

U.S. agricultural exports hit continuous records. The agricultural trade surplus has risen from \$1.5 billion in 1970 to \$16.6 billion in 1979, while the nonagricultural trade balance dropped from a surplus of \$1.3 billion to a deficit of \$40 billion.

#### THE GLOBAL ECONOMIC SETTING

Rising population and income and efforts to upgrade diets are the factors behind the growth in world demand for food. Despite slowed economic growth in the high-income market economies in the midseventies, steady and rapid gains in the high-income developing nations (especially the Middle East and East Asia) and in the centrally planned countries have been major forces determining worldwide grain, oilseed, and animal-protein demand.

As we look toward 1980, uncertainty abounds again in the market economies of the high-income countries. The OPEC price increases of 1979, coupled with persistent inflation, now appear to be turning economic output down in the United States. Although business activity

has been stronger than earlier expected up to this point, recent Government actions to slow monetary growth are expected to bring a pause. The extent of the decline is difficult to predict.

These developments should help wring some of the inflation out of the economy in the year ahead. It now seems possible that real growth could drop significantly and lead to a situation much weaker than the "soft landing" predicted by a number of economists earlier this year.

While the United States is likely to be in a "recognized" recession by the fourth quarter of 1979 or early next year, the outlook for Canada, Western Europe, and Japan points to a noticeable slowdown running some 6 months behind the United States. Although the recent oil price increases and general signs of tightening point to a slowdown in much of the Western World, the decline in economic activity is not likely to be as sharp as the 1974-75 recession.

## ESTIMATED ECONOMIC INDICATORS

[Selected countries/regions]

Country/area	Change in gross national product		Change in Consumer Price Index	
	1978	1979 forecast	1978	1979 forecast
United States.....	4.4	2.0	7.7	10.9
U.S.S.R.....	4.0	3.0	(1)	(1)
East Europe.....	5.5	6.0	(1)	(1)
EC-9.....	3.0	3.0	7.1	9.0
Japan.....	5.5	5.8	4.3	5.1
Canada.....	3.4	3.5	8.9	9.4
Australia.....	3.7	3.5	7.9	9.0
Brazil.....	6.3	5.0	41.0	50.0
Argentina.....	-4.1	4.0	170.0	150.0
India.....	3.9	4.5	7.5	9.0
LDC's:				
Asia.....	6.4	6.5	8.3	9.2
Africa.....	3.2	4.5	9.0	10.5
Latin America.....	4.6	5.4	(1)	(1)
OPEC.....	4.2	4.8	17.0	16.0
OECD.....	3.5	3.0	7.0	(1)

<sup>1</sup> Not available.

Economic growth is expected to continue, though at a somewhat moderated pace, in the centrally planned economies and the rapid-growth emerging nations, including those dependent on high-priced oil imports. Despite problems with inflation and high oil prices, a number of the food-importing nations have relatively good financial reserves to help them maintain diets.

On balance, the global economic picture indicates the demand for food will expand in the year ahead—at a pace less than that of the past 2 years but more rapid than the 1974-75 period. Requirements for feed grains and oilseeds should remain fairly strong, as the demand for meat, milk, and eggs continues to grow.

### *Inflation*

With prospects for slower growth in the United States and most of the rest of the world, some progress should be made in slowing the rate of inflation. However, any progress is likely to be mainly in the eyes of the experts. Countries dependent on imported petroleum will continue to face severe cost pressure from OPEC increases and the strong overall rate of inflation that accompanies these increases. After reach-

ing an annual rate of increase in excess of 13 percent during the second and third quarters of 1979, the Consumer Price Index (CPI) is expected to slow to a rate of around 11 percent in the final quarter of this year.

If the slowing in economic activity occurs as anticipated, increases in the CPI should decelerate in 1980. By late in the year, increases could drop below the double-digit rate. Thus, the increase for the year should be below the 11 percent of 1979.

As inflation has continued, real after-tax incomes have been declining since the second quarter of this year. That pattern is expected to continue at least through the first half of 1980 before any major recovery is likely in consumer real buying power.

Inflation, of course, hurts farmers as well as consumers. U.S. farmers purchase roughly 70 percent of their production inputs from the nonfarm economy. During October, the index of prices paid by farmers was up 14 percent from the same month a year earlier,

#### WORLD COMMODITY OUTLOOK

Prospects for 1980 and the following couple of years point to continued growth in world food and fiber demand. Production, too, will continue to grow, though the rate of increase appears to be diminishing.

The rate of increase in global grain production dropped from 3.2 percent per year in the 1960's to 2.9 percent in the 1970's—and most of that gain has become absorbed by population growth. The main reason for the decline is lagging productivity. While the growth in harvested area rose slightly during the 1970's the rate of improvement in yields dropped from 3 percent per year to 1.8 percent.

#### WORLD SUPPLY AND UTILIZATION: GRAINS, OILSEEDS, COTTON

Item	1970/71	1975/76	1976/77	1977/78	1978/79 <sup>1</sup>	1979/80 <sup>2</sup>
Million metric tons						
<b>Total grains:<sup>3</sup></b>						
Beginning stocks.....	205	133	138	194	191	226
Production.....	1,100	1,238	1,354	1,336	1,448	1,382
Total supply.....	1,305	1,371	1,492	1,530	1,629	1,608
Utilization.....	1,139	1,233	1,298	1,339	1,413	1,419
Ending stocks.....	166	138	194	191	226	189
Stocks as a percent of use.....	(15)	(11)	(15)	(14)	(16)	(13)
World trade.....	109	151	156	166	173	191
<b>Oilseeds:<sup>4</sup></b>						
Beginning stocks.....	6.7	7.5	8.6	6.6	6.9	7.4
Production.....	56.2	75.9	67.4	79.7	85.2	196.5
Total supply.....	62.9	81.4	76.0	86.3	92.1	103.9
Utilization.....	59.6	72.8	69.4	79.4	84.7	91.1
Ending stocks.....	3.3	8.6	6.6	6.9	7.4	12.8
Stocks as a percent of use.....	(5.5)	(11.8)	(9.5)	(8.7)	(8.7)	(14.1)
World trade.....	24.7	32.5	33.6	38.8	41.2	44.7
Million 480-lb. bales						
<b>Cotton:</b>						
Beginning stocks.....	22.2	30.9	24.0	20.7	24.0	21.6
Production.....	53.7	54.0	57.4	63.9	59.8	63.8
Total supply.....	75.9	84.9	81.6	84.6	83.8	85.4
Utilization.....	56.1	61.2	60.9	61.2	62.8	63.1
Ending stocks.....	20.9	24.0	20.7	24.0	21.6	22.6
Stocks as a percent of use.....	(37)	(39)	(34)	(39)	(34)	(36)
World trade.....	17.7	19.1	17.6	19.1	19.5	9.9

<sup>1</sup> Preliminary.

<sup>2</sup> Projected.

<sup>3</sup> Including milled rice.

<sup>4</sup> Soybean meal equivalent.

<sup>5</sup> Total supply less the ending stocks of soybeans and soybean meal in the United States, Brazil, and Argentina on Oct. 1.

*Grains*

We are projecting that 1979-80 world grain production will be about 4½ percent lower than last year's—the largest year-to-year drop on record.

The impact of similar production declines in the past has been harrowing. After a drop of less than 3 percent in 1972-73, world wheat prices more than doubled and feed grain prices rose by over 70 percent. After a production decline of less than 4 percent in 1974-75, global consumption of grain dropped by 2½ percent, the first worldwide consumption decline in over 20 years.

But the setting now is dramatically different from that of a few years ago. We anticipate no cutback in global grain use in 1979-80—in fact, we will probably see a modest increase, with world grain prices rising only slightly. There are a number of closely related reasons:

The 1978-79 world grain harvest was the largest ever. Stocks entering the 1979-80 marketing year were also at an all-time high of 226 million tons, and the stocks-to-use ratio was a comfortable 16 percent—roughly 60 percent above the tighter levels of the midseventies. Record-high consumption will draw stocks to around 190 million tons by the end of this season, but the stocks-to-use ratio will dip only to about 13½ percent.

The world stocks picture is made more secure by the United States grain reserve system. The reserve, most of which is farmer owned, accounted for about 45 percent of the U.S. stocks of 73 million tons at the beginning of 1979-80. The system allows grain supplies to be released to the market or isolated in the reserve depending on price levels. This action serves to modify price fluctuations resulting from savings in supplies.

Large supplies of oilseeds worldwide, somewhat in excess of expected 1979-80 requirements, will depress oilseed prices and dampen increases in grain prices.

Though consumption and trade of grain are expected to be record large next year, both might have been stronger had economic growth not begun to slow in most parts of the world. Although pork and poultry feeding is expanding, growth in U.S. and world grain feeding is limited by the rebuilding phase of the cattle cycle.

We project that world grain trade in 1979-80 will exceed 190 million tons for the first time, with the United States accounting for 110 million tons. The U.S. exports will include records for wheat, at 38 million tons, feed grains, at 71 million tons, and rice, at 2.6 million tons (milled basis).

The strong foreign demand is boosting U.S. farm prices, despite the anticipated record 1979-80 U.S. total grain crop of over 288 million tons. With grain prices strong relative to those for oilseeds, U.S. farmers will probably increase acreage planted to corn in 1980.

## U.S. FARM PRICES

Crop	1977/78	1978/79	Forecast 1979/80
Wheat (dollars per bushel).....	2.33	2.94	3.60-3.90
Corn (dollars per bushel).....	2.02	2.20	2.35-2.65
Soybeans (dollars per bushel).....	5.88	6.75	5.75-6.50
Rice (dollars per hundredweight).....	9.49	8.00	8.75-9.75
Cotton (cents per pound).....	52.3	58.8	-----

### *Oilseeds*

Probably the most striking single example of the growth in demand for agricultural products during the seventies is the expansion in consumption of oilseeds and products. Global consumption of oilseeds and meats had risen nearly 60 percent during the seventies—a 4.7 percent annual compound growth rate. This growth mainly reflects increased demand for animal products. Some of the world's sharpest gains in meat consumption have occurred in some Western European countries and Eastern Europe, Japan, the Soviet Union, and parts of Central and Latin America. A number of these countries are major U.S. markets for oilseeds and other feedstuffs.

Through most of the seventies, yearly consumption gains pretty closely matched production increases. The results were minimal build-up of oilseed stocks and generally strong prices. Global production of oilseeds and meals has increased 77 percent since 1969-70; since 1976-77, output is up 43 percent. To distribute that production, world oilseed trade has risen 83 percent during the seventies.

It is important to note that U.S. producers were by no means the only ones to benefit from the increased demand for oilseed products. While United States soybean production has more than doubled during the seventies to more than 60 million tons, Brazilian output has increased fivefold to a forecast 13.5 million tons. Argentine production has evolved from practically none to about 4.5 million tons with considerable potential for more increase. These three countries account for about 80 percent of global soybean production and 98 percent of world trade.

Though world consumption will climb again in 1979-80, it will not match the anticipated 13.2-percent increase in oilseed and meal production. As a result, we expect to see some buildup in stocks and a weakening on oilseed prices—U.S. soybeans may average around \$6.25 per bushel in 1979-80, compared with this past season's \$6.75. With corn prices strong relative to oilseeds, U.S. producers will probably cut back in soybean plantings in 1980.

We also might anticipate some weakening in demand for oilseeds in the latter half of 1979-80, reflecting the slowdown in economic growth and an easing in the expansion of livestock industries in most major countries.

### *Cotton*

World demand for cotton, too, has increased during the seventies, though not at the pace of grains and oilseeds. A gain in consumption of about 13 percent since 1969-70 has been surpassed by production growth of about 18 percent, so stocks have built up slightly. With global cotton stocks consistently around 35-40 percent of use, prices have not fluctuated with nearly the magnitude of grain prices. Aside from production changes, world cotton prices have fluctuated mainly with variation in economic activity and with the degree of competition from manmade fibers.

Global use of synthetic fibers increased much more rapidly than cotton consumption during the seventies, about 81 percent, though cotton has become more competitive in the past several years as rising petroleum costs have driven up synthetic product prices.

In 1979-80 world cotton consumption is expected to be a record-high 63 million bales. Global output should be up 4 million bales from

last year and slightly higher than consumption. Most of the increase in production is occurring in the United States.

The U.S. crop has rebounded sharply from last year's weather damaged harvest to about 14.4 million bales, reflecting record yields. U.S. exports are expected to hit a 19-year high of 6.5 million bales because of relatively low stocks and increasing use in foreign countries, but slower economic growth here should reduce domestic mill use slightly from last year's. As a result, U.S. cotton stocks are increasing sharply this season, placing some downward pressure on prices.

### *Livestock*

The commodity price gyrations of the midseventies caused chaos for the world's livestock producers. Rising grain, oilseed, and energy prices sent production costs soaring, while demand for livestock products weakened with the general economic slowdown that followed the 1974 boom in petroleum prices.

In 1975, the most severe reduction in U.S. cattle herds in history began and selloffs were pronounced in other major producing countries as well. U.S. cattle members continued to decline until 1979, and cattlemen are only beginning to rebuild their herds. U.S. beef production, meanwhile, dropped 18 percent between 1976 and 1979 and probably will not increase again until 1981.

U.S. LIVESTOCK PRODUCTION AND PRICES

	1975	1976	1977	1978	1979	Forecast, 1980
<b>Beef:</b>						
Production (million pounds).....	23.7	25.7	25.0	24.0	21.1	20.5-21.3
Prices (dollars per hundredweight).....	45	39	40	52	68	70-73
<b>Pork:</b>						
Production (million pounds).....	11.6	12.5	13.1	13.2	15.2	16.3-17.0
Prices (dollars per hundredweight).....	48	43	41	48	42	34-37
<b>Broilers:</b>						
Production (million pounds).....	8.0	9.0	9.2	9.9	10.9	10.5-11.0
Price (dollars per hundredweight).....	45	40	41	45	43	40-43
<b>Eggs:</b>						
Production (million dozen).....	5.4	5.4	5.4	5.6	5.7	5.7-5.9
Price (cents per dozen).....	64	70	63	62	68	65-68
<b>Milk:</b>						
Production (billion pounds).....	115	120	123	122	123	122.8-125.2
Price (dollars per hundredweight).....	8.8	9.7	9.7	10.6	12.1	12.8-13.8

Hog and poultry producers were able to capitalize more quickly than the cattlemen on the lower feed costs and expanding demand for meats that followed the chaos of the mid-1970's period. While world production of beef has fallen since 1976, production of pork and poultry in the major producing countries has risen about a fifth. The gains in pork and especially in poultry production have boosted overall world meat production slightly faster than the rate of growth in population.

Annual growth in poultry meat consumption has been particularly staggering in recent years. Double-digit rates of growth have been occurring in the high-income Middle Eastern countries, Brazil, and other rapid-growth Central and Latin America countries. Yearly gains are also rising in the centrally planned economies and in many high-income countries.

With beef supplies low and retail prices high, demand for pork and poultry has been particularly strong. U.S. producers have increased

their pork output 31 percent since 1975, including a 15-percent jump in 1979, and broiler output 38 percent since 1975, with an 11-percent increase this year. As a result of the current overexpansion, pork and poultry producers face a difficult year as the prices they receive drop below rising production costs.

Despite some slowing in demand, cattle prices should continue their gradual recovery from the 1976-77 lows. With beef production down about 12 percent in 1979 and not expected to gain in 1980, steer prices should average above the \$70-per-hundredweight level by the latter half of next year.

#### IMPLICATIONS FOR U.S. AGRICULTURAL TRADE

The economist who predicted here 10 years ago that U.S. agricultural exports might exceed \$6 billion in 1969-70 was correct. He could hardly have imagined, though, where the United States would go from there. We have wrapped up the 1970's with exports well exceeding \$30 billion, and we now forecast that 1979-80 exports could reach \$38 billion—unless domestic transportation problems overwhelm us.

Through the 1970's the biggest gains have been in shipments of grains, particularly feed grains, and oilseeds, while the nonfood share of agricultural exports has declined. The volume of exports may increase about 16 percent in the coming year. More than half of this is a 12-million-ton increase in feed grain exports.

#### U.S. AGRICULTURAL TRADE BALANCE

[In billions of dollars]

	1969/70	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	Forecast, 1979/80
Exports.....	6.96	21.61	21.85	22.76	24.00	27.30	31.98	38.0
Imports.....	5.68	10.06	9.47	10.51	13.38	13.89	16.19	17.5
Trade balance.....	1.28	11.55	12.38	12.25	10.62	13.42	15.79	20.5

As it has been throughout the 1970's, the European Community will be the largest market for U.S. agricultural exports in 1979-80 with purchases of about \$7.7 billion. Japan will take about \$5.3 billion, to remain the largest U.S. single-country market. Soviet purchases in 1979-80 should total about \$4 billion, by far their largest ever. Other leading markets are Latin America at \$3.5 billion and Eastern Europe at \$2.2 billion.

It is worth noting that the Soviet Union, even in its peak import years, has yet to surpass Japan in dollar value of imports from the United States. The Soviet situation receives more attention because of the considerable variation in their imports from year to year, while the Japanese market has remained steady.

It also bears mentioning that the United States, in addition to its role as the largest seller of agricultural products, is one of the world's largest buyers of agricultural products. Coffee will again be the largest U.S. import by value, followed by meats, fruits, nuts, and vegetables, sugar, cocoa, rubber, and wine. The United States is not only the world's largest importer of meat, but the largest producer and consumer as well.

	U.S. share (percent) of world—			Ending stocks	Share of U.S. production exported
	Production	Trade	Consumption		
<b>Wheat:</b>					
1970/71	12	36	6	30	54
1978/79	11	45	6	24	66
1979/80 <sup>1</sup>	14	48	5	27	66
<b>Feed grains:</b>					
1970/71	25	42	24	43	13
1978/79	29	64	21	49	28
1979/80 <sup>1</sup>	31	70	21	54	32
<b>Rice:</b>					
1970/71	1	19	1	3	55
1978/79	2	21	1	4	57
1979/80 <sup>1</sup>	2	23	1	5	60
<b>Soybeans:</b>					
1970/71	81	90	40	85	59
1978/79	69	71	30	55	59
1979/80 <sup>1</sup>	70	70	29	66	54
<b>Cotton:</b>					
1970/71	19	22	15	20	38
1978/79	18	32	10	19	57
1979/80 <sup>1</sup>	23	33	10	25	45

<sup>1</sup> Forecast.

## AGRICULTURAL AND NONAGRICULTURAL TRADE BALANCES, 1930-79

[In billions of dollars]

Calendar year:	Agricultural			Nonagricultural balance	Total balance
	Exports	Imports	Balance		
1930	1.2	1.5	-0.3	+1.0	+0.7
1935	.7	1.0	-.3	+ .5	+ .2
1940	.5	1.3	-.8	+2.1	+1.3
1945	2.3	1.7	+ .5	+4.9	+5.4
1950	2.9	4.0	-1.1	+2.5	+1.4
1955	3.2	4.0	-.8	+4.9	+4.1
1960	4.8	3.8	+1.0	+4.4	+5.4
1965	6.2	4.1	+2.1	+3.7	+5.8
1970	7.3	5.8	+1.5	+1.3	+2.8
1972	9.4	6.5	+2.9	-9.3	-6.4
1973	17.7	8.4	+9.3	-8.0	+1.3
1974	22.0	10.3	+11.7	-14.8	-3.1
1975	21.9	9.3	+12.6	-2.8	+9.8
1976	23.0	11.0	+12.0	-20.7	-8.7
1977	23.7	13.5	+10.2	-40.0	-29.8
1978	29.4	14.8	+14.6	-46.4	-31.8
1979 <sup>1</sup>	33.2	16.6	+16.6	-40.0	-23.4

<sup>1</sup> Forecast.

This year's record U.S. agricultural imports of a projected \$17.5 billion implies another record U.S. agricultural trade surplus of over \$20 billion. With a nonagricultural trade deficit running in the neighborhood of \$40 billion in 1978-79, the agricultural sector has again gone a long way toward easing U.S. balance of payments problems.

*Transportation*

Probably the greatest limitation the United States faces in realizing the enormous level of exports projected for 1979-80 will be transporting farm products to the port. This problem is also affecting movement to domestic markets.

Labor difficulties slowed shipment of grains through some major elevators this past summer and heavy traffic has clogged some waterways. Major railway problems, spot railcar shortages, tight energy supplies, and rising fuel prices could further add to transportation difficulties as the United States attempts to move an unprecedented volume of grains, oilseeds, and other farm commodities to domestic markets and ports.

## KEY COUNTRY AND REGIONAL PROSPECTS

*Soviet Union*

The Soviet role in world agricultural trade has hinged on two variables: yearly grain production and the Kremlin's commitment to improving domestic diets.

The Soviet Union in good years has surpassed the United States in total grain production. However, most of its grain acreage is in areas that would be considered marginal by U.S. standards and consequently are quite vulnerable to weather variations. For example, only 1 percent of Soviet farmland receives an average of 28 inches or more rain per year, compared with an estimated 60 percent of U.S. farmland.

Only in recent years have the Soviets amassed a significant amount of modern grain storage facilities, which has made it difficult for them to store excess supplies after a good harvest. It is interesting to note that the Soviet Union accounts for about 15-16 percent of the world's grain usage, but only 8 percent of oilseed use. Increased usage of protein meal would yield much more efficient feeding rations for the growing Soviet livestock industry.

Since 1972 the Soviets have protected diets and expanded livestock production by importing grain to compensate for domestic shortfalls. The 5-year bilateral agreement, now entering its fourth year, guarantees the Soviets a supplier and alleviates much of the uncertainty U.S. exporters associate with this market.

*People's Republic of China*

Like the Soviet Union, China's involvement in the agricultural marketplace rests mainly on political decisions on improving diets. The Chinese had not purchased U.S. agricultural products for 23 years when they resumed importing from the United States in 1972, though on a small scale. Chinese imports of U.S. grains, oilseeds, and cotton exceeded \$600 million in 1973 and 1974 and should be over \$800 million in calendar 1979.

With a population of nearly a billion people, the potential of the Chinese market is staggering. The Government apparently is committed to improving the diets of its people. The Chinese are now importing the technology to improve their food production and processing ability in the longer term and the food and foodstuffs to protect diets in the short term. Chinese purchases will be constrained for the time being, however, by their limited availability of foreign exchange and by rising world grain prices.

*India*

The 1970's saw a transition for India that was a mirror image of the Soviet Union's. An unprecedented four consecutive good harvests from 1975-76 to 1978-79 enabled India to build up its stock levels and evolve from one of the world's leading grain importers to a net exporter the past 2 years. This year's damaged crop will jeopardize that development, however—total grain production is expected to fall about 13 percent.

*Argentina*

A combination of changing Government policies and an excellent resource base has helped Argentina establish itself during the 1970's as one of the world's leading exporters of grains, oilseeds, and live-

stock products. Argentina has great potential for further expanding production and exports. In fact, its only major constraints are the capacity of its port facilities and its domestic transportation problems.

In favorable growing years, Argentina's corn yields rival those of the United States, and that is achieved with only minimal inputs of fertilizer and pesticides. With substantial amounts of additional cropland available and with Government policies meant to improve productivity and encourage exports, Argentina's share of world trade, particularly of soybeans, is likely to continue to grow during the 1980's.

### *Brazil*

Brazil has become the second largest producer and exporter of soybeans during the past several years and, like Argentina, it has the potential to extend its market share. Most of Brazil's increases in production have come through expansions in area rather than improved yields and much uncultivated land still awaits the plow.

With population and income rising, however, Brazil still has to import large quantities of food. Major steps are underway to expand agricultural production.

### *High-income East Asia*

The rapidly growing countries in East Asia—Taiwan, the Republic of Korea, Singapore, Hong Kong, and Malaysia—have become major consumers of agricultural commodities. Economic growth in this region has been phenomenal at about 8 percent per year. In many ways these nations seem on a path not unlike the one Japan followed a decade or so ago. Annual use of grains in this region of the world in the 1970's has been over 4 percent per annum compared with a little over 2 percent for Japan. Consumption of red meats and especially poultry has expanded significantly in this part of the world as more and more animal protein has moved into the diet.

While production of grains is relatively small in this part of the world, crops have generally been good in 1979-80. This is in contrast with the situation in the centrally planned countries of Southeast Asia that have been ravaged by poor weather, political turmoil, and war.

### *Middle East*

With the emergence of the OPEC nations, no area of the world demonstrates as strong a growth potential as North Africa and the Middle East. Meat consumption in the OPEC countries of this region has been increasing at an average annual rate of over 14 percent per year with annual consumption of poultry increasing as much as 20 percent per year in the 1970's. Although incomes are highly skewed in this region, it is becoming an increasingly important market for some of the food exporting countries of that part of the world.

## IMPLICATIONS FOR RETAIL FOOD PRICES

Sharp increases in prices for livestock and products—particularly cattle—beginning late in 1978 and continuing through last April set the stage for sharp increases in retail food prices in early 1979. From January through May, the monthly increase in retail food prices averaged 1.3 percent. As livestock prices at the farm level declined begin-

ning in May, the increase in prices for food at the grocery store began to slow.

With farm prices weakening more than those at retail, the spread between farm and retail prices widened sharply during the early summer months. As a result, the President called a number of major food retailers to Washington in August to discuss the wide spreads between farm and retail prices. Retail prices did decline for the month of August and increased modestly in September. For the balance of the year large pork, poultry, and fruit and vegetable supplies suggest only small increases are likely in the overall retail food price component of the CPI.

Most of the increase since mid-1979 has reflected rising costs of marketing and processing food. However, net profit data suggest that retail food chains have done unusually well in 1979.

For the year as a whole, it appears that retail food prices will average about 11 percent higher than 1978. During 1978 food prices averaged a tenth above the previous year.

For 1980, it appears that meat supplies will continue to be large at least through the first half of the year. Pork and poultry slaughter are running at record levels and producer prices are depressed below the cost of production. As a result, production of hogs and broilers will likely be cut back in the second half of 1980. With live animal prices depressed and large fruit and vegetable supplies expected, retail food price increases should be fairly modest through the first half of 1980. In fact, most of the price rise will probably reflect the increased cost of processing, transporting and marketing food.

Reduced supplies of pork and poultry and stronger live animal prices in general point to upward pressure on retail food prices during the second half of 1980. This kind of a pattern—modest increases in the first half year and stronger rises in the second half—is in contrast to the pattern of food prices that we have experienced in recent years.

For the year as a whole, it now appears that retail food prices will average somewhere between 7 and 11 percent above the 1979 level. The cost of marketing and processing food in 1980—always heavily influenced by the overall rate of inflation—will probably rise in the neighborhood of 9 to 12 percent from the 1979 levels.

#### U.S. PRICES, INCOME, AND UNEMPLOYMENT<sup>1</sup>

Year	Inflation rate	Real income change	Unemployment rate
1970.....	5.9	3.0	4.9
1971.....	4.3	2.6	5.9
1972.....	3.3	3.3	5.6
1973.....	6.2	5.9	4.9
1974.....	11.0	-2.2	5.6
1975.....	9.1	1.3	8.5
1976.....	5.8	3.0	7.7
1977.....	6.5	3.4	7.0
1978.....	7.7	3.8	6.0
1979.....	11.1	.7	6.1

<sup>1</sup> Inflation rate reflects annual percent change in consumer price index for all items. Real income as measured by annual percent change in real per capita disposable income in 1972 dollars. Unemployment rate is annual rate for all workers.

Source: Department of Commerce and Bureau of Labor Statistics.

## IMPLICATIONS FOR FARM INCOME

The farm income situation in 1979 has turned out better than originally expected. Record U.S. crops, coupled with strong domestic and foreign demand, have boosted farmers' returns. As a result, net farm income is expected to total \$30-\$32 billion, compared with last year's \$28 billion. This increase is occurring despite a 10-12-percent rise in farm production expenses.

For 1980, the picture is less promising. Crop receipts will be up for most major commodities in the year ahead with the possible exception of oilseeds. Receipts from the marketing of livestock products will be steady, or up only fractionally, reflecting lower returns for hogs and broilers. With only a modest growth in demand for food and agricultural commodities expected in 1980, cash receipts are likely to rise only modestly. Production expenses, however, will continue to surge, fueled by the underlying rate of inflation in the economy. This means that producers are likely to be squeezed, particularly in the latter part of 1980.

Input prices for most of the items that farmers buy are determined in markets in which firms often have considerable control over output. Thus, manufacturers are often able to gear output in line with demand to produce prices that will cover their costs. Fuel prices have risen about 40 percent in 1979 and are likely to continue their rapid advance in the year ahead. Fertilizer prices are expected to rise more than the overall rate of inflation, reflecting a tightening in nitrogen and phosphate markets.

The only exceptions to the overall pattern of rising prices may be feed, pesticides, and some other farm chemicals whose prices may advance somewhat less than the rate of general price inflation. Most other items can be expected to advance sharply and put a severe pinch on many producers.

While the rising cost of farm production inputs will cause producers to make adjustments in their operations, it is difficult in the short run to predict what changes will occur. For example, as input costs rise, farmers may shift toward less energy intensive commodities. Also, they are likely to take steps to reduce energy requirements in individual operations to the extent that adjustments are possible. However, predicting such actions is extremely difficult—it is an area in which we need considerably more analysis.

On the balance, with cash receipts likely to rise only slightly in the year ahead, and farm production expenses likely to increase roughly in line with the rate of inflation, net farm income for 1980 could slip into the mid-\$20 billion range. This would be a sharp fall from the 1979 level. Producers of pork and poultry likely will be squeezed throughout most of the first half of the year before they cut their operations back. Crop producers, particularly in high-cost areas, will face severe squeezes for much of the year ahead.