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## 1978 HANDBOOK OF AGRICULTURAL CHARTS

U.S.D.A.

National Agricultural Library, Received
United States Department of Agriculture
Agriculture Handbook No. 551


The Handbook of Agricultural Charts is timed for release at the annual USDA Outlook Conference held in Washington, D.C. The focus of the 1978 conference, held on November 13-16, was commodity prospects for 1979, international trade and farm program issues, and outlook for the consumer and homemaker.

These outlook conferences are open to the public, at no charge, and each year attract over 1,000 leaders in agricultural extension work, agribusiness, commodity trading, and the press. For more information, contact Gerry Schumacher, Room 550, 500 Twelfth St., S.W., Washington, D.C. 20250.


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## 1978 Agricultural Chartbook Committee

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## INTRODUCTION

Welcome to the 1978 Handbook of Agricultural Charts. You'll find over 270 charts, on everything from cost of farm inputs to world agricultural trade to food stamps. Tables, background, and explanatory text are also included.

In reading the charts, please note that all years are calendar years unless otherwise indicated. Current-year figures shown on the charts and tables for crops reflect the midpoint of a range of likely prospects for supplies and use. But since there is still considerable uncertainty surrounding the final outcome of supply-use balances for crops, you should refer to upcoming USDA releases to stay abreast of outlook developments.

## More Information

Along this line, USDA's Economics, Statistics, and Cooperatives Service offers several publications that regularly update agricultural economic information. They include:

Agricultural Outlook, a monthly magazine which gives statistical updates and economic analyses of the food and agriculture scene. (A free copy and subscription information will be sent upon request.)

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Other periodic reports: Agricultural Finance Outlook; Farm Real Estate Market Developments; Outlook for U.S. Agricultural Exports; World Agricultural Situation; Price Spreads for Farm Foods; Agricultural Supply and Demand Report; and National Food Review.

Farmer Cooperatives, a monthly magazine reporting research and technical assistance activities of ESCS Cooperatives Divisions and other
developments among agricultural cooperatives (free copy and subscription information available on request).

Statistics of Farmer Cooperatives, an annual compilation of national data about the business activity of agricultural marketing, supply, and related service cooperatives.

Farmers' Newsletter, a free service to producers. Six different titles, each published at least five times a year, offer the special information farmers need to make production and marketing decisions: Wheat, Livestock, Feed, Oilseeds, Cotton, General. Specify titles when ordering.

To receive any of the above publications, write to ESCS Publications, 0054-South BIdg., USDA, Washington, D.C. 20250.

ESCS's Crop Reporting Board publishes a full schedule of production and stocks estimates covering 150 crops and 50 livestock and related products, as well as summaries of prices, labor, farm numbers, and other topics. For a complete listing, release dates, and how to order, write for a Crop Reporting Board Catalog, free from the Crop Reporting Board, Room 0005-South, USDA, Washington, D.C. 20250.

Do you see any charts in this year's Handbook which you would like to order as prints or slides? If so, see the Index, page 129 for information on how to order.

## Suggestions or Questions?

If you have questions or suggestions about anything in the Handbook of Agricultural Charts, please let us know. We would also be interested in knowing what you find useful in the Handbook and how you use its individual charts, tables, and slides.

Write to us at: Popular Publications Group, Room 550, 500 Twelfth St. S.W., USDA, Washington, D.C. 20250.

## THE FARM

4 Income
10 Inputs
16 Output
17 Assets and Finances


## INCOME

Although these income components yield a generally upward but erratic gross income, a steadier and more persistent growth in the producer's expenses etches a much more volatile net income from farming.

Following years of fairly steady growth, cash receipts jumped during the early 1970's, as the result of reduced crop supplies worldwide. With
a rebuilding of grain supplies in the mid-1970's, crop prices came under downward pressure, triggering economic and political forces that are returning Government payments as a significant component of gross farm income.

For 1978, net farm income is projected to increase to about $\$ 26$ billion.

## INCOME FROM FARMING



Net farm income excluding value of changes in producer-owned crop and livestock ir ventories.

Income From Farming ${ }^{1}$

|  | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  |  |  |  | Billion dollars |  |  |  |  |  |  |
| Gross income | 58.6 | 60.6 | 701 | 95.5 | 99.9 | 96.9 | 104.1 | 108.1 |  |  |
| Marketing receipts | 50.5 | 52.9 | 612 | 87.1 | 92.4 | 88.2 | 94.5 | 96.1 |  |  |
| Government payments <br> Nonmoney and other <br> income | 3.7 | 3.1 | 40 | 2.6 | .5 | .8 | .7 | 1.8 |  |  |
| Production expenses | 4.3 | 4.6 | 50 | 5.8 | 7.0 | 7.9 | 8.9 | 10.2 |  |  |
| Net farm income before <br> inventory adjustment | 44.4 | 47.4 | 52.3 | 65.6 | 72.2 | 75.9 | 81.0 | 88.0 |  |  |

'This net farm income series does not take into account changes in producer-owned crop and livestock inventories.

Data from Farm Income Statistics, July 1978 (ESCS).

Details may not add to totals because of independent rounding.

## INCOME

U.S. farm operators earned a total family income of $\$ 52$ billion from farm and off-farm sources in 1977, an increase of 6 percent from 1976. And most of this income came from offfarm sources.

Farm operator families, and a largely overlapping group defined as people living on farms, earned nearly 60 percent of their income from
off-farm sources during the past 2 years. During 1977, the average income of farm operator families was $\$ 11,600$ from off-farm earnings, with their average net income from farming only $\$ 7,440$ before inventory adjustment, and $\$ 7,590$ after adjustment.

INCOME OF FARM OPERATOR FAMILIES


| Income of Farm Operator Families |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1965 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
|  | Billion dollars |  |  |  |  |  |  |  |
| Net farm income ${ }^{1}$ | 12.9 | 14.6 | 18.7 | 33.3 | 26.1 | 24.5 | 18.8 | 20.6 |
| Off-farm income | 12.7 | 18.8 | 20.6 | 23.8 | 26.5 | 27.5 | 30.4 | 31.4 |
| Total family income | 25.6 | 33.5 | 39.3 | 57.1 | 52.6 | 51.9 | 49.1 | 51.9 |
| 'Includes an adjustment for changes in commodity inventories. Represents return to operator families' labor, capital, and management. |  |  |  |  |  |  |  |  |

[^0]
## INCOME

Nearly all farm operator families have some off-farm income, but generally the smaller the farm, the higher the proportion off-farm earnings are of total family income. Recently, farmers selling less than $\$ 20,000$ in farm products per year averaged over 80 percent of total family income from off-farm sources.

Farmers with farm product sales of $\$ 20,000$
or more continue to average a greater share of family earnings from the farm.

## AVERAGE FAMILY INCOME, ALL SOURCES



| Average Family Income, All Sources |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1965 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
|  | 1,000 dollars |  |  |  |  |  |  |  |
| Average family income: |  |  |  |  |  |  |  |  |
| Operators having farm sales |  |  |  |  |  |  |  |  |
| of \$20,000 or more | 15.7 | 18.8 | 24.3 | 36.3 | 33.9 | 27.3 | 27.3 | 26.2 |
| Net farm income ${ }^{1}$ | 12.4 | 14.6 | 19.7 | 31.1 | 28.1 | 21.4 | 20.6 | 19.1 |
| Off-farm income | 3.2 | 4.3 | 4.6 | 5.2 | 5.8 | 5.9 | 6.7 | 7.1 |
| Operators having farm sales |  |  |  |  |  |  |  |  |
| of less than \$20,000 | 6.1 | 9.1 | 10.4 | 12.5 | 13.5 | 13.7 | 15.2 | 15.9 |
| Net farm income ${ }^{1}$ | 2.2 | 2.1 | 2.5 | 2.8 | 2.5 | 2.2 | 2.2 | 2.3 |
| Off-farm income | 3.9 | 7.0 | 7.9 | 9.7 | 11.0 | 11.5 | 13.0 | 13.6 |
| ${ }^{1}$ Before adjustment for inventory change. |  |  |  |  |  |  |  |  |
| Data from Farm Income Statistics, July 1978 (ESCS). |  |  |  |  |  |  |  |  |
| Totals may not add due to rou |  |  |  |  |  |  |  |  |

## INCOME

Per capita income of the farm population fluctuates more than that of the nonfarm population. However, during most years, a substantial proportion of people living on farms receives significant amounts of income from nonfarm sources. This tends to reduce some of the difference in the two groups' incomes.

The fluctuation for the farm population is
associated with net returns from farming. While not all farm income goes to people living on farms, the bulk does. The net represents a return to farm operators for contributions of labor, capital, and management. While such earnings have not kept pace with inflation, those operators who own or are buying their farms have gained considerably from rising farm values.

## DISPOSABLE PERSONAL INCOME PER CAPITA



Disposable personal income represents income from all sources less personal contributions for social insurance and personal tax and nontax payments.

Disposable Personal Income Per Capita

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | :---: | :---: | :---: | :---: |
|  | Dollars |  |  |  |
| Per capita income from <br> all sources: |  |  |  |  |
| $\quad$ Total population | 4,647 | 5,038 | 5,505 | 6,010 |
| $\quad$ Farm population | 4,355 | 4,520 | 4,427 | 4,946 |
| $\quad$ Nonfarm population | 4,660 | 5,113 | 5,548 | 6,049 |
|  |  | Percent |  |  |
| Farm as percentage | 93.5 | 88.4 | 79.8 | 81.8 |

Data from Farm Income Statistics, July 1978 (ESCS).

NET INCOME FROM FARMING AFTER INVENTORY ADJUSTMENT


Income from all sources.

Net Income From Farming After Inventory Adjustment

|  | 1970 | 1971 | 1972 | 1973 |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | Billion dollars |  |  |  |  |
| Current dollars | 14.2 | 14.6 | 18.7 | 33.3 |  |
| Real dollars (1967) | 12.2 | 12.1 | 14.9 | 25.1 |  |
|  | 1974 | 1975 | 1976 | 1977 |  |
|  |  | Billion dollars |  |  |  |
| Current dollars | 26.1 | 24.5 | 18.8 | 20.6 |  |
| Real dollars (1967) | 17.7 | 15.2 | 11.0 | 11.3 |  |

## INCOME

In 1977, farms with sales of $\$ 200,000$ or more represented only 2 percent of all farms but accounted for 35 percent of cash receipts and 13 percent of net income. Those with sales of $\$ 100,000-\$ 199,999$ made up 4 percent of farms, 17 percent of cash receipts, and 18 percent of net income. Smaller farms received 11 percent of cash receipts and 21 percent of net income.

Net income per farm, before adjustments, has changed dramatically for farms with annual sales of $\$ 200,000$ or more-rising from $\$ 60,000$ in 1971 to nearly \$150,000 in 1973, and dropping to about \$50,000 in 1977.


1977 data. Net income before adjustment for inventory change.
Cash Receipts, Net Income and Farms by Sales Classes, 1977

|  | Cash <br> receipts | Net <br> income ${ }^{1}$ | Farms |
| :--- | ---: | ---: | ---: |
| Farm sales classes: | Million dollars |  | Thousands |
| $\$ 200,000$ and over | 35,357 | 2,637 | 55 |
| $\$ 100,000-199,999$ | 16,867 | 3,569 | 107 |
| $\$ 40,000-99,999$ | 25,469 | 6,439 | 348 |
| $\$ 20,000-39,999$ | 11,089 | 3,208 | 321 |
| Under \$20,000 | 10,668 | 4,278 | 1,875 |
| $\quad$ All farms | 99,450 | 20,131 | 2,706 |

Percent of total sales
Farm sales classes:

| $\$ 200,000$ and over | 35 | 13 | 2 |
| :--- | ---: | ---: | ---: |
| $\$ 100,000-199,999$ | 17 | 18 | 4 |
| $\$ 40,000-99,999$ | 26 | 32 | 13 |
| $\$ 20,000-39,999$ | 11 | 16 | 12 |
| Under $\$ 20,000$ | 11 | 21 | 69 |
| $\quad$ All farms | 100 | 100 | 100 |
| Before adjustment. |  |  |  |

Data from Farm Income Statistics, July 1978 (ESCS).

NET INCOME PER FARM BY SALES CLASSES


Net Income Per Farm by Sales Classes

|  | 1975 | 1976 | 1977 |
| :---: | :---: | :---: | :---: |
|  | Number |  |  |
| Farms with annual sales: |  |  |  |
| \$200,000 and over | 47 | 53 | 55 |
| \$100,000-\$199,999 | 93 | 104 | 107 |
| \$40,000-\$99,999 | 314 | 341 | 348 |
| \$20,000-\$39,999 | 323 | 323 | 321 |
| Under \$20,000 | 1,990 | 1,917 | 1,875 |
|  | Dollars |  |  |
| Net income ${ }^{1}$ for farms |  |  |  |
|  |  |  |  |
| \$200,000 and over | 76,681 | 65,302 | 47,946 |
| \$100,000-\$199,999 | 37,613 | 35,789 | 33,356 |
| \$40,000-\$99,999 | 19,812 | 19,052 | 18,502 |
| \$20,000-\$39,999 | 10,254 | 9,926 | 9,993 |
| Under \$20,000 | 2,231 | 2,206 | 2,282 |
| ${ }^{1}$ Before adjustment for inventory change. |  |  |  |

## INCOME

After rising sharply in the early seventies, prices received by farmers weakened in 1977, recovering later in the year. For 1978, prices should average about 15 percent above 1977. Strong foreign demand caused crop prices to almost double during 1972-74, but with expanding world grain production and building stocks, prices declined from the 1974 peak.

Livestock prices, stable in recent years, should rise as beef output tapers off and demand rises.

Prices paid by farmers have more than doubled during the past decade. Rate of gain is likely to accelerate in 1978 but remain below 1973-74 levels. For 1978, farmers will pay about 8.5 percent more for living and production items over 1977.

## PRICES RECEIVED AND PAID BY FARMERS



Prices paid includes commodities and services, interest, taxes, and wage rates. 1977 forecasted.

Prices Received and Paid by Farmers

|  | 1971 | 1972 | 1973 | 1974 |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Prices received: | Percent of 1967 |  |  |  |  |
| Farm products | 113 | 125 | 179 | 192 |  |
| Crops | 108 | 114 | 175 | 224 |  |
| Livestock | 118 | 136 | 183 | 165 |  |
| Prices paid $^{1}$ | 118 | 125 | 144 | 164 |  |
|  | 1975 | 1976 | 1977 | $1978^{2}$ |  |
|  |  |  |  |  |  |
| Prices received: | 185 | 186 | 183 | 208 |  |
| Farm products | 172 | 197 | 192 | 202 |  |
| $\quad$ Crops | 180 | 191 | 202 | 219 |  |

[^1] rates. ${ }^{2}$ Forecast.

## PRICES RECEIVED BY FARMERS <br> FOR MAJOR COMMODITIES




## INPUTS

Prices paid by farmers continue to increase. In the past decade, prices of production goods have risen at a faster rate than family living. However, the sharpest increases in recent years have been for interest and farm wage rates.

Labor inputs have declined nearly 30 percent since 1967, while farm real estate has remained fairly constant. Farmers have substituted
mechanical power and machinery for labor and agricultural chemicals for land. Too, tractor size continues to increase. New units sold have gone from an average size of 55 horsepower in 1963 to 105 horsepower in 1977. Fertilizer use in 1978 is near the 1976 record level.

## CHANGES IN PRICES FARMERS PAY



1978 January-June average. Taxes include State and local property taxes on farm real estate.

## Changes in Prices Farmers Pay

|  | 1975 | 1976 | 1977 | 1978 |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Percent of 1967 |  |  |  |  |
| Production | 182 | 193 | 200 | 212 |  |
| Interest | 254 | 287 | 331 | 384 |  |
| Taxes | 166 | 178 | 195 | 210 |  |
| Farm wage rates | 192 | 210 | 226 | 245 |  |
| Family living $^{1}$ | 166 | 176 | 181 | 190 |  |

${ }^{1}$ The Consumer Price Index (CPI) was substituted for the Family Living Index beginning January 1977.

USE OF SELECTED FARM INPUTS
\% OF 1967


Use of Selected Farm Inputs

|  | 1975 | 1976 | 1977 | $1978{ }^{1}$ |
| :--- | ---: | :---: | :---: | :---: |
|  | Percent of 1967 |  |  |  |
| Total inputs | 100 | 102 | 103 | 102 |
| Labor | 76 | 73 | 71 | 71 |
| Farm real estate | 96 | 94 | 97 | 97 |
| Mechanical power and | 113 | 115 | 116 | 117 |
| $\quad$ machinery | 127 | 145 | 151 | 150 |
| Agricultural chemicals | 101 | 106 | 107 | 108 |
| All other inputs |  |  |  |  |
| $\quad{ }^{1}$ Preliminary. |  |  |  |  |

## INPUTS

Prices paid by farmers in 1978 continued their upward trend, for the most part. Prices paid for farm real estate tripled since 1967 while wage rate and machinery prices increased two and a half times. Fertilizer prices were a little weaker than a year earlier.

Total farm production expenses for 1977 are broken down below. On a national scale, they
amounted to $\$ 97.9$ billion, 9.7 percent more than a year earlier. The average outlay per farm was $\$ 36,238$, compared with $\$ 32,165$ in 1976. As can be expected, the larger farms accounted for a greater share of production expenses.

## PRICES OF SELECTED FARM INPUTS



1978 preliminary.

Prices of Selected Farm Inputs

|  | 1971 | 1972 | 1973 | 1974 |
| :---: | :---: | :---: | :---: | :---: |
|  | Percent of 1967 |  |  |  |
| Wage rates | 134 | 142 | 155 | 178 |
| Fertilizer | 91 | 94 | 102 | 167 |
| Farm machinery ${ }^{1}$ | 122 | 128 | 137 | 161 |
| Farm real estate | 122 | 132 | 150 | 187 |
|  | 1975 | 1976 | 1977 | $1978{ }^{2}$ |
|  | Percent of 1967 |  |  |  |
| Wage rates | 192 | 210 | 226 | 246 |
| Fertilizer | 217 | 185 | 181 | 181 |
| Farm machinery ${ }^{1}$ | 195 | 217 | 238 | 256 |
| Farm real estate | 213 | 242 | 283 | 308 |

[^2]FARM PRODUCTION EXPENDITURES


Major expenditures as percentage of total. 1977 data.

FARM PRODUCTION EXPENDITURES BY SALES CLASSES


1977 data.

## INPUTS

Historically, fertilizer prices have experienced a series of market cycles, averaging about 10 years in length. However, the last cycle was shorter, mostly because of: 1) the rapid increase in fertilizer demand in 1973 and 1974, and the equally rapid decline in demand in 1975, and 2) the boost in production capacity since then.

The increase in fertilizer demand was prompt-
ed by a rise in grain prices in 1973 and 1974. Likewise, the 1975 drop-off in demand was due to reduced crop prices and the continued increase in fertilizer prices. For the 1978/79 season, fertilizer inventories are large and production capacity is excessive. Therefore, supplies will be equal to or above year-earlier levels, keeping the damper on prices.

## FERTILIZER USE AND PRICES





Use: fiscal year ended June 30. Retail price: April 15 through 1976; average of March and May 15, 1977 and 1978.

Fertilizer Use and Prices

|  | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,000 tons |  |  |  |  |  |  |  |
| Use: ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Anhydrous ammonia ${ }^{2}$ | 3,968.3 | 3,636.2 | 3,408.5 | 4,178.8 | 4,016.6 | 4,934.6 | 4,926.2 | NA |
| Concentrated superphosphate | 1,216.3 | 1,248.9 | 1,180.7 | 1,174.9 | 1,158.9 | 1,206.3 | 1,224.6 | NA |
| Potash | 2,263.6 | 2,445.6 | 2,829.5 | 3,256.6 | 2,996.2 | 3,745.2 | 4,392.3 | NA |
|  | Dollars/ton |  |  |  |  |  |  |  |
| Price: ${ }^{3}$ |  |  |  |  |  |  |  |  |
| Anhydrous ammonia | 79.30 | 80.00 | 87.60 | 183.00 | 265.00 | 191.00 | 188.00 | 174.00 |
| Concentrated superphosphate | 76.60 | 78.00 | 87.50 | 150.00 | 214.00 | 158.00 | 147.00 | 152.00 |
| Potash | 58.20 | 58.80 | 61.50 | 81.30 | 102.00 | 95.90 | 96.35 | 97.40 |

[^3] 15 through 1976; average of March and May 15, 1977, and 1978.
$N A=$ not available.

## INPUTS

As farmers replace old gasoline and LPpowered machines by more energy-efficient diesel-powered machinery, diesel fuel use as a percentage of total farm fuel use continues to rise. Overall, energy use at the farm level is increasing very slowly.

Corn is the crop using the most energy in the aggregate, although cotton is the most
energy-intensive crop based on per-acre energy requirements. This is partially because cotton has relatively high pesticide requirements.

## FARM FUEL USE



ENERGY USE BY CROP, U.S. TOTAL AND AVERAGE PER ACRE


1974 data. Kilocalorie is the metric energy measurement comparable to $\mathrm{BTU}, 1 \mathrm{KCAL}=4 \mathrm{BTU}$.

## INPUTS

The dramatic increase in energy prices during 1973-74 slowed considerably for gasoline and diesel fuel in 1978. LP gas, electricity, and natural gas prices, however, continue to rise. Although energy costs make up only 8 to 12 percent of farmers' production costs, farming is becoming increasingly energy intensive, partially as a reaction to high labor costs.

Despite increasing energy costs, a move back to labor-intense agriculture is unlikely, since labor is over 880 times as expensive as electricity per hour of work performed.

ENERGY PRICES PAID BY FARMERS


Energy Prices Paid by Farmers

|  | 1974 | 1975 | 1976 | 1977 | 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cents/gallon |  |  |  |
| Gasoline | 53.8 | 53.3 | 53.2 | 57.5 | 57.9 |
| Diesel | 37.2 | 39.1 | 41.3 | 45.5 | 45.8 |
| LPG | 30.2 | 30.4 | 33.1 | 37.8 | 41.1 |
| Electricity |  | Cents/10 KWH |  |  |  |
|  | 26.7 | 30.8 | 33.5 | 36.8 | -.. |
|  |  | Dollars/hour |  |  |  |
| Labor | 2.32 | 2.45 | 2.65 | 2.90 | ${ }^{1} 3.00$ |

[^4]ENERGY PRICES PER BTU PAID BY FARMERS

$1 \mathrm{Kcal}=4 \mathrm{BTU}$

Energy Prices per BTU Paid By Farmers

|  | 1975 | 1976 | 1977 | 1978 |
| :--- | ---: | ---: | ---: | ---: |
|  | Cents/million BTUs |  |  |  |
| Gasoline | 426.4 | 425.6 | 460 | 463.2 |
| Diesel | 279.3 | 294.0 | 325.0 | 327.1 |
| LP | 320.1 | 348.5 | 398.0 | 432.8 |
| Natural gas' | 129.0 | 160.0 | 197.0 |  |
| Electricity | 902.4 | 981.6 | $1,078.2$ |  |

${ }^{1}$ American Gas Association total average price.

## INPUTS

Production costs are based on a planted acre. The bar charts show the costs on a per-unit basis. The per-unit costs are derived from the plantedacre yield. Per-acre costs and per-unit costs may move in opposite directions from year to year, depending on yield changes.

These costs are from Costs of Producing Selected Crops in the United States - 1976,

1977, and Projections for 1978, U.S. Senate Committee print 24-607, March 31, 1978. Perunit costs for 1978 have been updated, however, using production projections and planted acreage in USDA's September 12, 1978, Crop Production report, and where necessary, plantedacre data in the June 30, 1978, Acreage report. (See page 2 for ordering information.)

## ESTIMATED AVERAGE CROP PRODUCTION COSTS



Land at acquisition value data not available for rice.

Crop Production Costs

|  | Wheat ${ }^{1}$ |  | Corn |  | Sorghum |  | Barley |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1977^{2}$ | $1978{ }^{3}$ | $1977^{2}$ | $1978{ }^{3}$ | $1977^{2}$ | $1978{ }^{3}$ | $1977^{2}$ | $1978{ }^{3}$ |
|  | Dollars |  |  |  |  |  |  |  |
| Costs per unit: |  |  |  |  |  |  |  |  |
| Total, excluding land | 2.38 | 2.54 | 1.60 | 1.54 | 1.80 | 2.08 | 1.78 | 1.68 |
| Total, including land at: |  |  |  |  |  |  |  |  |
| Acquisition value | 3.05 | 3.27 | 2.12 | 2.14 | 2.15 | 2.50 | 2.27 | 2.22 |
| Current value | 3.62 | 3.88 | 2.50 | 2.43 | 2.37 | 2.75 | 2.66 | 2.52 |
|  | Oats |  | Soybeans |  | Rice |  | Cotton ${ }^{4}$ |  |
|  | $1977^{2}$ | $1978{ }^{3}$ | $1977^{2}$ | $1978{ }^{3}$ | $1977^{2}$ | $1978{ }^{3}$ | $1977^{2}$ | $1978{ }^{3}$ |
|  | Dollars |  |  |  |  |  |  |  |
| Costs per unit: |  |  |  |  |  |  |  |  |
| Total, excluding land | 97 | 1.14 | 3.26 | 3.52 | 7.14 | 7.56 | . 463 | . 545 |
| Total, including land at |  |  |  |  |  |  |  |  |
| Acquisition value | 1.36 | 1.59 | 4.78 | 5.26 | NA | NA | . 536 | . 661 |
| Current value | 1.76 | 2.12 | 5.69 | 6.36 | 9.02 | 9.41 | . 566 | . 700 |
| ${ }^{1}$ Value of pasture subtracted from production costs (1976-77, 6 cents/bushel; 1978, 5 cents/bushel). ${ }^{2}$ Preliminary. ${ }^{3}$ ${ }^{4}$ Value of cotton seed subtracted from production costs (1976, 8.4 cents/pound of lint; 1977, 5.5 cents/pound; 1978, 7.2 cents/pound). $N A=$ not available. |  |  |  |  |  |  |  |  |

## OUTPUT

U.S. farm output for 1978 is equal to last year's record-over one-fifth greater than in 1967. Total farm inputs edged downward, although these inputs are the most productive on record. Productivity gains in farm labor continue to outstrip those in nonfarm labor.

Crop production in 1978 is near last year's level, although cropland used for crops is down

3 percent after 5 years of increase. However, output per acre is at a record level. Livestock production is at a high as well. Stepped-up production of hog, poultry, and eggs offsets the liquidation of cattle and the decline in milk production.

## OUTPUT PER MAN-HOUR, FARM AND NONFARM BUSINESS



1977 preliminary. Source: Bureau of Labor Statistics.

## CROP AND LIVESTOCK PRODUCTION



1978 preliminary

FARM PRODUCTIVITY
\% OF 1967


1978 preliminary.

Farm Output and Productivity

|  | 1975 | 1976 | 1977 | $1978^{1}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Percent of 1967 |  |  |  |  |
| Farm output | 114 | 117 | 121 | 120 |  |
| $\quad$ Crop | 121 | 121 | 129 | 128 |  |
| $\quad$ Livestock | 101 | 105 | 106 | 108 |  |
| Farm inputs | 100 | 102 | 103 | 102 |  |
| Output per unit of input | 115 | 115 | 118 | 118 |  |
| Output per man-hour: ${ }^{2}$ |  |  |  |  |  |
| $\quad$ Farm | 145 | 148 | 164 | --- |  |
| $\quad$ Nonfarm business | 110 | 114 | 117 | -- |  |
| $\quad{ }^{1}$ Preliminary. ${ }^{2} 1977$ is preliminary. |  |  |  |  |  |

## ASSETS AND FINANCES

The value of farm assets has iricreased rapidly in the last 28 years. This value rose $\$ 190$ billion during 1950-70, and has increased another \$394 billion since that time. Sharp rises in the value of farmland since 1971 have been the main cause of the recent jumps.

Farm debt has more than doubled since 1970, but at the beginning of 1978 , was still only one-
sixth the value of farm assets-a much lower ratio than for most large nonfarm businesses.

The debt-to-asset ratio for farm real estate is normally about half that for nonreal estate, but the rapid rise in nonreal estate debt during 1977 pushed that ratio unusually high.

FARM DEBT


FARM DEBTS AS PERCENT OF ASSETS


Data as of January 1.

## ASSETS AND FINANCES

With the average value of farm real estate at $\$ 196,200$ and other farm assets at $\$ 68,300$, the average value of assets per farm was well over $\$ 250,000$ at the beginning of 1978. This was a great increase from the average of $\$ 23,400$ in 1950 or even $\$ 106,800$ in 1970. Debts against those assets have climbed gradually since 1950 when they averaged $\$ 2,300$ per farm; on Jan. 1,

1978, they totaled $\$ 45,700$ per farm.
Capital gains on farm physical assets (change in va'ue less net investment) showed relatively small net increases during 1960-70. Since 1970, however, the gains have accelerated sharply, although most are unrealized (that is, not spendable cash) due to rapid increases in farm value.

ANNUAL CHANGE IN FARM DEBT \$ BIL.


Difference between debt outstanding at beginning and end of year. Excludes
Commodity Credit Corporation loans.

## FARM ASSETS AND DEBTS

PER FARM
\$ THOUS.


Data as of January 1. 1978 preliminary.

CHANGE IN FARM VALUES MINUS YEARLY IMPROVEMENTS



Change in value less yearly improvements; mostly unrealized. Other assets include machinery and motor vehicles, livestock and poultry, and crops stored on farms.

Farm Assets and Debts Per Farm

|  | 1971 | 1972 | 1973 | 1974 |
| :---: | :---: | :---: | :---: | :---: |
|  | 1,000 dollars |  |  |  |
| Assets: |  |  |  |  |
| Real estate | 76.9 | 83.8 | 94.4 | 117.3 |
| Nonreal estate | 35.3 | 38.9 | 44.6 | 53.5 |
| Debts: |  |  |  |  |
| Real estate | 10.5 | 11.3 | 12.6 | 14.8 |
| Nonreal estate | 8.3 | 9.4 | 10.4 | 11.8 |
|  | 1975 | 1976 | 1977 | $1978{ }^{1}$ |
|  | 1,000 dollars |  |  |  |
| Assets: |  |  |  |  |
| Real estate | 133.2 | 152.3 | 178.8 | 196.2 |
| Nonreal estate | 53.3 | 59.1 | 63.2 | 68.1 |
| Debts: ${ }^{\text {R }}$ |  |  |  |  |
| Real estate | 16.7 | 18.7 | 20.9 | 23.6 |
| Nonreal estate | 12.8 | 14.5 | 17.0 | 20.7 |
| ${ }^{1}$ Preliminary. |  |  |  |  |

## ASSETS AND FINANCES

At the beginning of 1978, real-estate-secured debt made up a little over half of the total; nonreal-estate debt a little less than half; and Commodity Credit Corporation (CCC) price support loans the remainder. In 1977 and 1978, the Federal Government increased its efforts to support prices and incomes, resulting in a large increase in CCC loans.

The largest sources for real estate loans are

Federal land banks and individuals and others. Many of the latter are sellers of farms who provide loan funds to buyers. Banks and production credit associations are the largest sources of nonreal-estate loans. The Farmers Home Administration provides credit to farmers or prospective farmers who are unable to obtain adequate loan funds from other lenders.

## WHO HOLDS THE FARM DEBT

\% OF TOTAL




Production Credit Association includes Federal Intermediate Credit Bank loans to other financial institutions. 1978 preliminary.

## IMPORTANCE OF THE THREE KINDS OF FARM DEBT



Nonreal estate excludes CCC loans. 1978 preliminary.

Importance of the Three Kinds of Farm Debt

|  | 1975 | 1976 | 1977 | 1978 |
| :--- | ---: | ---: | ---: | ---: |
|  | Percent |  |  |  |
| Real estate debt | 56.6 | 56.2 | 55.1 | 53.3 |
| Nonreal estate debt <br> (excluding CCC) | 43.0 | 43.4 | 43.9 | 42.9 |
| CCC | 0.4 | 0.4 | 1.0 | 3.8 |

## ASSETS AND FINANCES

Interest rates on real estate farm loans started to increase in the middle of 1978, and further rises are likely later in the year and in 1979. Rates on urban home mortgages reached record levels in the summer of 1978; rates on farm real estate loans reflect some of the same upward pressures.

Rates on nonreal estate farm loans have also
been rising. At mid-1978, Production Credit Association loans were 8.9 percent, about 1 pers rtage point higher than a year earlier. Rates on bank nonreal estate farm loans are also rising.

## INTEREST RATES ON FARM REAL ESTATE LOANS



Quarterly data for life insurance companies (new commitments) and Federal Land Banks (new loans). Semiannual data for seller financed. Federal Land Bank rates do not include charge for 5 - to 10 -percent stock requirements.

Interest Rates on Farm Real Estate Loans

|  | Federal <br> Land <br> Banks | Life <br> insurance <br> companies | Seller- <br> financed |
| :---: | :---: | :---: | :---: |
| Percent |  |  |  |
| 1977: | 8.4 | 9.4 |  |
| I | 8.4 | 9.3 | 7.8 |
| II | 8.3 | 9.3 | 7.8 |
| III | 8.3 | 9.3 |  |
| IV |  |  | 7.8 |
| 1978: | 8.2 | 9.3 |  |
| I |  |  |  |

INTEREST RATES ON NONREAL ESTATE FARM LOANS
PERCENT


Rates on PCA loans include service fees. Bank data starting in 1977 are from surveys made by the Federal Reserve System. The data for prior years relate to different groupings of banks, collected by the Federal Reserve System and the Federal Reserve Bank of Minneapolis. *Data not available.

Interest Rates on Nonreal Estate Farm Loans

|  | Production <br> credit <br> associations | Large <br> commercial <br> banks | Rural <br> banks |
| :---: | :---: | :---: | :---: |
| 1977: | Percent |  |  |
| I | 8.05 | 8.4 | 8.9 |
| II | 7.9 | 7.8 | 8.8 |
| III | 7.8 | 8.4 | 8.8 |
| IV | 7.9 | 9.1 | 9.1 |
| 1978: |  |  |  |
| I | 8.3 | 9.3 | 9.2 |
| II | 8.6 |  |  |

## ASSETS AND FINANCES

Farm real estate taxes continue to increase throughout the 1970's. Taxes per acre climbed again in 1977, rising from $\$ 3.17$ in 1976 to an estimated $\$ 3.43$ in 1977. The bulk of this increase was again due to a rise in the valuation of farmland, however, as taxes per \$100 of valuation remained approximately constant.

To ease the tax burden on farmers caused by
increasing property taxes, most States have enacted some form of preferential property tax treatment for qualifying farmland. Although the eligibility requirements and the exact form of the tax preferences vary by State, most State plans are of one of the following types: preferential assessment, deferred taxation, or restrictive agreement.

FARM REAL ESTATE TAXES
DOLLARS


Tax per $\$ 100$ based on market value. 1978 preliminary.

## FARM REAL ESTATE TAXES PER ACRE



[^5]
## ASSETS AND FINANCES

Farmland prices increased an average of 9 percent for the year ending February 1, 1978-the smallest annual percentage increase since 1972. This pushed the index to 308 , representing a 105 -percent increase over the past 5 years, and more than tripling the average value per acre in 1967.

During the year ending February 1, 1979, the
value of farmland is expected to rise another 6 to 10 percent. The national average value per acre was $\$ 490$, with State averages ranging from $\$ 93$ an acre in New Mexico to $\$ 2,051$ an acre in New Jersey.

INDEX OF U.S. FARM REAL ESTATE VALUE PER ACRE


CHANGE IN PER ACRE VALUE FROM PREVIOUS YEAR


Reported as of March 1, 1912-75, and February 1, 1976, to date. Excludes Alaska
and Hawaii. Data unavailable prior to 1912.

## NATURAL RESOURCES

23 Land Use<br>28 Water<br>31 Other Resources



## LAND USE

The United States has a land area of 2,264 million acres. One-fifth is cropland; more than one-fourth is permanent grassland pasture and range; nearly one-third is forest land; and the final one-fifth comprises a variety of special use areas and unclassified land. About three-fifths of the land is owned by individuals, estates, trusts, and corporations.

The use made of land is a function of both ownership and land quality. Nearly all land used for crop production is privately owned. Much of the land in "special uses" is mountainous, desert, or swampland, which was never claimed by private owners and remained in the public domain.

## MAJOR USES OF LAND

MIL. ACRES
2,500 _


1974 data

## LAND OWNERSHIP IN THE UNITED STATES



1974 data.

## MAJOR LAND USES BY OWNERSHIP



1974 data.

## LAND USE

The overall downtrend in number of farms has been accompanied by a decrease in land in farms, but an increase in the average farm size. In 1960, for example, an average farm had 302 acres; where in 1974, it had 440.

The drop in farm numbers has been most marked in those farms operated by tenants, both in absolute numbers and relative importance.

Tenant farms comprised 42 percent of all farms in 1935 , but by 1974 accounted for only 11 percent. During this same period, the percentage of farms operated by full owners rose from 47 percent to 63 percent, and by part owners, from 10 to 26 percent. Part owners, although much fewer in number than full owners, control the most land and rank highest in value of products sold.

## NUMBER OF FARMS, BY TENURE OF OPERATOR



Managed farms were discontinued in 1969. Such farms were classified by tenure based on whether the land operated was owned or rented after 1969.1974 preliminary data. Source: Census of Agriculture.

## LAND IN FARMS, BY TENURE OF OPERATOR



Data not available for 1910 and 1920 for part owners and tenants. Source: Census of Agriculture.

## LAND USE

Although the distribution of farms and land in farms by tenure class of operator has changed greatly over time, the average size of farm has increased in all tenure classes.

Since the 1950's, farms in both the part-owner and tenant categories have increased substantially in average size, while farms in the full-owner category have increased only moderately in size.

In comparison with the national average of 440 acres, part-owner farms now average 852 acres; tenant farms, 465 acres; and full-owner farms, 252 acres.

## SIZE OF FARM, BY TENURE OF OPERATOR

ACRES


Data not available for 1910 and 1920 for part owners, tenants, and full owners.
Source: Census of Agriculture.

Number of Farms, Land in Farms, and Size of Farm, by Tenure of Operator

|  | 1900 | 1910 | 1920 | 1930 | 1940 | 1950 | 1954 | 1959 | 1964 | 1969 | 1974 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousand |  |  |  |  |  |  |  |  |  |  |
| Number of farms: |  |  |  |  |  |  |  |  |  |  |  |
| Full owners' | 3,262 | 3,414 | 3,437 | 2,969 | 3,122 | 3,115 | 2,758 | 2,139 | 1,836 | 1,706 | 1,424 |
| Part owners | 452 | 594 | 559 | 657 | 616 | 826 | 857 | 811 | 782 | 672 | 628 |
| Tenants | 2,026 | 2,358 | 2,459 | 2,669 | 2,365 | 1,447 | 1,168 | 760 | 540 | 353 | 262 |
| Total | 5,740 | 6,366 | 6,454 | 6,295 | 6.102 | 5,388 | 4,783 | 3,708 | 3,158 | 2,730 | 2,314 |
| Land in farms: Nillion acres |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Full owners and managers | 521 | 519 | NA | 436 | 451 | 526 | 495 | 458 | 432 | 375 | 359 |
| Part owners | 125 | 134 | NA | 247 | 301 | 423 | 470 | 498 | 533 | 551 | 535 |
| Tenants | 195 | 227 | NA | 307 | 313 | 212 | 193 | 167 | 145 | 138 | 122 |
| Total | 841 | 879 | 959 | 990 | 1,065 | 1,161 | 1,158 | 1,123 | 1,110 | 1,063 | 1,017 |
| Size of farm: Acres | Acres |  |  |  |  |  |  |  |  |  |  |
| Full owners | 135 | 139 | NA | 128 | 124 | 136 | 145 | 165 | 175 | 220 |  |
| Part owners | 277 | 225 | NA | 375 | 489 | 512 | 549 | 614 | 682 | 819 | 852 |
| Tenants | 96 | 96 | NA | 115 | 132 | 147 | 165 | 220 | 268 | 390 | 467 |
| Total | 147 | 138 | 149 | 157 | 175 | 216 | 242 | 303 | 352 | 389 | 440 |

'Includes managers for years prior to 1969. $N A=$ not available.

## LAND USE

Each year, part of the Nation's cropland is used for crops, part for pasture, and part is idlebut the proportions may vary significantly. The acreage actually used for crops declined during the fifties and early sixties, remained relatively stable through 1972, and then increased sharply in response to strong export demand. The current acreage is 3 percent below the 1977 acreage,
but still 10 percent above the 1972 acreage.
Cropland used for crops in 1978 declined 3 percent after increasing in each of the last 5 years. Greater use of yield-increasing inputs and improved cultural practices have stepped-up crop production per acre by nearly one-fifth since 1967.

HOW CROP OUTPUT COMPARES WITH POPULATION INCREASE


MAJOR USES OF CROPLAND


## CROP PRODUCTION PER ACRE AND CROPLAND USED FOR CROPS

\% OF 1967


Cropland Output, Crop Production Per Acre, and U.S. Population


## WATER

About 12 percent of the Nation's harvested crop acres are irrigated and account for more than a fourth of the value of crop production. Several million additional acres of pastureland are irrigated. In irrigated agriculture, the energy cost for pumping is a big and growing cost. Currently, most pumps ( 42 percent) use electricity, followed by natural gas ( 32 percent). The out-
look for electric pumps is more favorable because of hydrogeneration and because many generating plants use coal or can shift to it.

## IRRIGATED LAND IN FARMS



Data plotted on a 5 -year basis, corresponding with the U.S. Census of Agriculture.

IRRIGATED AND NONIRRIGATED
ACREAGE HARVESTED AND VALUE OF PRODUCTION


ACRES IRRIGATED WITH PUMPED WATER, BY TYPE OF ENERGY USED


1974 data.

## WATER

Water quality and supply problems are critical to farmers because agriculture is the Nation's biggest water user. Although municipal and industrial users actually withdraw more water than does agriculture, they return most of it to streams. In contrast, irrigators return only about half of the water they withdraw.

Nearly three-fifths of the irrigation water
applied is withdrawn from surface streams and lakes, and the remainder (except for a fraction from reclaimed sewage) is from groundwater sources. In the West-where most of the country's irrigated land is located-weather variability may significantly affect the quantity of surface water accumulated in impoundments and, hence, the supply available for irrigation purposes.

WATER USE
MIL. ACRE FEET
400 -


Water Use
$1974 \quad 1975 \quad 1976 \quad 1977$

Million acre feet

| Agriculture: |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Water withdrawn | 119 | 130 | 140 | 160 |
| Water returned | 62 | 56 | 58 | 71 |
| Water consumed | 57 | 74 | 82 | 89 |
|  |  |  |  |  |
| Other uses: | 183 | 217 | 274 | 310 |
| Water withdrawn | 172 | 204 | 259 | 292 |
| Water returned | 11 | 13 | 15 | 18 |

WATER SOURCE FOR WESTERN CROP ACREAGE


## WATER

Acres under irrigation have steadily increased for many years and now exceed 41 million. Recent increases have been particularly large in western Kansas and several other areas. These increases are closely linked with the development of water sources and advances in irrigation technology.

Although the irrigated acreage increased
nationally, more than half of the counties reporting irrigated land in the 1974 Census of Agriculture had a net loss in irrigated land. Decreases in irrigation in the West usually reflect temporary or permanent limitations on the water supply, while those in the East tend to reflect adequate precipitation.

INCREASE IN IRRIGATED ACREAGE


Source: U.S. Census of Agriculture. 1969.74 data

## DECREASE IN IRRIGATED ACREAGE



## OTHER RESOURCES

The food system uses one-sixth of all energy used in the United States. Because of all the special forms and processing of foods that have been developed, as well as the increase in eating outside the home, actual production accounts for only a fifth of the food systems' total energy use.

The use of pesticides and fertilizers-which
account for more than a third of the energy used in actual agricultural production-has trended upward. Fertilizer nutrient use per acre is 5 times the 1950 rate, and is a main reason for increased crop yields. However, increasing energy costs tend to restrain the use of some agricultural chemicals.

ENERGY USED IN AGRICULTURAL PRODUCTION
Total
2,022 Trillion BTU's


1976 data.

FERTILIZER NUTRIENTS USED PER ACRE
POUNDS PER CROPLAND ACRE


ENERGY USED IN U.S. FOOD SYSTEM


1975 data.

VOLUME OF PESTICIDE SALES
MIL. LBS. (ACTIVE INGREDIENTS)


## POPULATION AND RURAL DEVELOPMENT

33 Population
35 Work Force
37 Income
39 Development
40 Small Farms


## POPULATION

The revival of rural and small town population growth since 1970 continues, with nonmetro counties maintaining higher growth rates than their metro counterparts. The faster nonmetro gain is often attributed to the spillover from metro centers. This is true to an extent, but the more isolated nonmetro counties not adjacent to metro areas also have reported substantial growth.

The pattern of faster population increase in nonmetro areas applies to all geographic regions of the United States except in the South. In this region, the nonmetro areas are growing at a rate that exceeds the U.S. average, but the metro areas are growing even faster.

## POPULATION CHANGE

## PERCENT



Adjacent counties refer to those bounding standard metropolitan statistical areas as defined in 1974. Source: U.S. Bureau of the Census.

Population Change ${ }^{1}$

|  | Percent |  |
| :--- | ---: | ---: |
| United States | 1.3 | .9 |
|  |  |  |
| Metropolitan | 1.6 | .7 |
| Nonmetropolitan | .4 | 1.2 |
|  |  | 1.3 |
| Adjacent counties ${ }^{2}$ | .7 | 1.1 |
| Nonadjacent counties | .1 |  |
| $\quad{ }^{1}$ Annual average. ${ }^{2}$ Counties adjacent to Standard Metro- |  |  |
| politan Statistical Areas as defined in 1974. |  |  |
| Source: U.S. Bureau of the Census. |  |  |

REGIONAL POPULATON GROWTH, PERCENTAGE CHANGE, 1970-76


[^6]
## POPULATION

Continuing a long-term downtrend, our farm population numbered about 7.8 million in 1977 , down 20 percent from 1970 and 50 percent from 1960. About 1 person out of 28 , or 3.6 percent of the Nation's 216 million people, had a farm residence in 1977. In 1920, when the farm population was first enumerated separately, about 1 person in 3 lived on a farm.

Net loss in the farm population through migration and reclassification of residence averaged 300,000 persons annually during 1970-77. This loss was low compared with other periods. As the total farm population from which migrants are drawn continues to diminish, the rate of migration will also decline.

## FARM POPULATION



1978 preliminary.
U.S. Total and Farm Population

|  | 1960 | 1970 | 1977 | 1978 |
| :---: | :---: | :---: | :---: | :---: |
|  | Thousand |  |  |  |
| Total resident population | 179,323 | 203,235 | 215,915 | 217,599 |
| Farm population | 15,635 | 9,712 | 7,806 | ${ }^{1} 8,000$ |
|  | Percent |  |  |  |
| Farm population's share of total population | 8.7 | 4.8 | 3.6 | 3.7 | ANNUAL NET OUTMOVEMENT

FROM THE FARM POPULATION


## WORK FORCE

The continuous downward trend in farm resident agricultural employment has been accompanied by a rise in the number of farm residents working in nonagricultural industries. The proportions of farm people employed in farm and nonfarm work are now nearly equal. In contrast, only an average 21 percent of hired farmworkers were farm residents during 1976-77,
compared with 65 percent in the forties.
Total farm employment, including farm operators, their families, and hired farmworkers, regardless of residence, has remained relatively stable during the seventies, after a long-term downward trend in previous years.

EMPLOYMENT OF FARM RESIDENTS
\% EMPLOYED


Percent of farm resident labor force 14 years old and over. Note: Comparable data not available for years prior to 1961.

## HIRED FARMWORKERS BY RESIDENCE



FARM EMPLOYMENT
MIL. WORKERS


Annual averages

Farm Employment

|  | 1970 | 1975 | 1976 | $1977^{1}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Million |  |  |  |  |
| Total workers ${ }^{1}$ | 4.5 | 4.3 | 4.4 | 4.2 |  |
| Family workers | 3.3 | 3.0 | 3.0 | 2.9 |  |
| Hired workers | 1.2 | 1.3 | 1.4 | 1.3 |  |

${ }^{1}$ Average number of persons employed in 1 survey week each month-through 1974 the last full calendar week ending at least 1 day before the end of the month; beginning with 1975, estimates are quarterly and include the week of the twelfth of January, April, July, and October.

NOTE: The Farm Employment chart is based on a quarterly average; the others include anyone that did hire farmwork during the year.

## WORK FORCE

The unemployment rate in nonmetro areas continues to fall from 1975 recession-level highs. Since 1975, the nonmetro unemployment rate has averaged about 1 percent less than the metro rate, except during the first quarter of each year, due to seasonal unemployment.

Rural areas gained 4.6 million nonfarm jobs between March 1970-78, for an increase of 26.7
percent, compared to 8.4 million more jobs, or a 15.7 -percent increase for metro areas.

While minorities make up nearly half the migrant farm work force-42 percent-whites actually account for 72 percent of all hired farmworkers. Hispanics and blacks and others account for 11 and 17 percent of all hired farmworkers, respectively.

## UNEMPLOYMENT RATES FOR METRO AND NONMETRO AREAS



Quarterly data. Source: Bureau of Labor Statistics.

## RACIAL/ETHNIC BACKGROUND OF HIRED FARMWORKERS



1977 data. Source: Hired Farm Working Force Survey of 1977.

PERCENT CHANGE IN NONFARM WAGE AND SALARY EMPLOYMENT, 1970-78
INDUSTRY GROUPS


## INCOME

Although substantial growth occurred in median family income during 1970-77, income in nonmetro areas remains lower than in metro areas. Median income in 1977 for nonmetro white families was about 80 percent of that for metro white families. Despite the gains among nonmetro black families, their median income was but 72 percent of metro blacks and 52
percent of nonmetro white families.
In 1977, farm families in general received 61 percent of their net income from off-farm sources. Families with farm sales valued under $\$ 5,000$ received the highest proportion -90 percent or more-from nonfarm sources. Families living on our country's largest farms obtained one-fifth their earnings from off-farm sources.

MEDIAN FAMILY INCOME
\$ THOUS.


The median is the middle value with half the families below and half above. Source: Bureau of the Census.

Median Family Income ${ }^{1}$

|  | 1970 | 1973 | 1977 |
| :--- | ---: | ---: | ---: |
|  | Dollars |  |  |
| Metro |  |  |  |
| White | 11,203 | 13,566 | 18,211 |
| Black | 7,140 | 7,779 | 10,431 |
|  |  |  |  |
| Nonmetro | 8,661 | 10,788 | 14,403 |
| White | 4,397 | 5,780 | 7,512 |

${ }^{1}$ The median is the middle value with half of the below and half above.

Source: U.S. Bureau of the Census.

FARM AND OFF-FARM INCOME PER FARM OPERATOR FAMILY BY VALUE OF FARM PRODUCTS SOLD

Sales Classes



100 and over

All figures in thousand dollars


## INCOME

Nationwide, the percentage of persons living in poverty declined slightly between 1971 and 1976, mainly in nonmetro areas. However, metro central cities registered an increase.

Despite some improvements, many nonmetro parts of the country still have low incomes. In 1975, 272 nonmetro counties, or 11 percent, had per capita incomes below $\$ 3,500$. Most low-
income counties were located in the Southern States. The East-South Central States had the highest concentration (over 35 percent) of lowincome nonmetro counties.

## PERSONS IN POVERTY



Persons in Poverty

|  | 1971 | 1976 |
| :--- | ---: | ---: |
|  | Percent |  |
| United States | 12.5 | 11.8 |
| Metro | 10.4 | 10.7 |
| Central City | 14.2 | 15.8 |
| Metro Ring | 7.2 | 6.9 |
|  | 17.2 | 14.0 |
| Nonmetro |  |  |
| Source: U.S. Bureau of the Census. |  |  |

## NONMETRO COUNTIES WITH LESS THAN \$3,500 PER CAPITA INCOME



## DEVELOPMENT

While the number of housing units completed in 1977 rose 27 percent over 1976, the rate was twice as large in metro as in nonmetro areas-34 percent, as compared to 15 percent. The percentage of housing lacking adequate plumbing has declined rapidly, but remains four times as high in nonmetro as in metro areas.

Federal outlays in fiscal 1976 for selected
programs, amounting to 81.6 percent of total outlays, were $\$ 314.5$ billion, or $\$ 1,476$ per capita. Total outlays per capita for most programs were higher in metro than in nonmetro areas.

In 1975, the physician-to-population ratio in nonmetro areas was less than half that in metro areas.

## PERCENT OF YEAR-ROUND HOUSING UNITS LACKING SOME OR ALL PLUMBING



1976 data. All plumbing includes inside hot and cold piped water, bath or shower, flush toilet. Source: U.S. Bureau of the Census 1976 Annual Housing Survey.

WHERE FEDERAL PROGRAM MONEY IS SPENT
PER CAPITA OUTLAYS


Includes FY 1976 expenditures, loans, and property transfers for 80 percent of Federal outlays for which the metro-nonmetro distribution is known.

HOUSING UNITS BUILT
NO. PER 1,000 HOUSEHOLDS


Includes conventional housing and mobile homes. Source: Bureau of the Census.

PHYSICIANS AND HOSPITAL BEDS NO. PER 10,000 POPULATION


[^7]
## SMALL FARMS

In 1975, nearly 64 percent of the farm population resided on farms with farm sales valued under \$20,000-defined in the Food and Agriculture Act of 1977 as small farms. Two-thirds of the small-farm population lived on farms selling less than $\$ 5,000$ a year.

Small-farm operators were somewhat older than operators of larger farms. While 23 percent
of the farm operators of small farms were 65 and over, only 10 percent of the larger farm operators had reached or surpassed this age.

About half of all male farm operators considered their principal occupation to be something other than farming. In general, families living on small farms receive most of their family income from off-farm sources.

## PERCENT OF FARM PEOPLE LIVING ON SMALL AND LARGE FARMS



1975 data. Large farms are those with sales of $\$ 20,000$ and over. Small farms are those with sales under $\$ 20,000$.

Large and Small Farms by Type

| Type of farms | Total farms | Large farms ${ }^{1}$ | Number | Percent of total |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Thousand |  |  | Percent |
| Farms with sales of $\$ 2,500$ and over ${ }^{3}$ | 1,682 | 796 | 886 | 52.7 |
| Cash grain | 580 | 303 | 277 | 47.8 |
| Cotton | 31 | 15 | 16 | 52.1 |
| Tobacco | 95 | 22 | 74 | 77.3 |
| Other crops | 126 | 55 | 71 | 56.2 |
| Vegetable, fruit, and nut | 71 | 32 | 39 | 54.9 |
| Livestock | 509 | 178 | 331 | 65.0 |
| Dairy | 196 | 141 | 55 | 28.1 |
| Poultry and egg | 43 | 38 | 5 | 11.3 |
| Horticultural and animal specialty | 31 | 13 | 18 | 58.8 |
| ${ }^{1}$ Sales \$20,000 and over. ${ }^{2}$ Sales under \$20,000. ${ }^{3}$ Excludes |  |  |  |  |
| Source: 1974 Census of | Iture. |  |  |  |

PRINCIPAL OCCUPATION OF FARM OPERATORS


1974 data. Large farms are those with sales of $\$ 20,000$ and over. Small farms are those with sales under $\$ 20,000$. Source: 1974 Census of Agriculture

## SMALL FARMS

Small-farm operators are engaged in all types of production. Nearly two-thirds of the livestock and half the cash grain farms are small, but dairy and poultry operations are least likely to be small.

Value of land and buildings per farm for small farms in 1974 was about one-fourth that of larger farms. However, the average value of assets
per acre was about 10 percent higher for small than for larger farms. Location of small farms, such as proximity to metropolitan areas, may account for why these farms had higher average value of assets than their larger counterparts.

## SMALL FARMS AS A PERCENT OF TOTAL FARMS



1974 data. Small farms are those with sales of under $\$ 20,000$. Total farms includes all farms with sales of $\$ 2,500$ and over. Source: 1974 Census of Agriculture.

## VALUE OF FARMLAND AND BUILDINGS



1974 data. Large farms are those with sales of $\$ 20,000$ and over. Small farms are those with sales of under $\$ 20,000$. Source: 1974 Census of Agriculture.

## THE CONSUMER

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## GENERAL ECONOMY

The Nation's economy continues to recover from the 1974-75 recession, but the rate of growth is slowing. Real Gross National Product rose nearly 4 percent at a seasonally adjusted annual rate in the first half of 1978. For the entire year, real growth is projected at around 4 percent. This compares with real gains of 5.7 and 4.9 percent in 1976 and 1977, respectively.

Personal consumption expenditures were weak during 1978's first quarter but strengthened during the second quarter.

Disposable personal income advanced during the first half of 1978 at about the same annual rate as in 1977. After adjustment for inflation, however, the rate of gain was considerably below 1977.

GROSS NATIONAL PRODUCT


Change from previous quarter. Seasonally adjusted annual rate. Based on data of Department of Commerce.

| Gross National Product ${ }^{1}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1976 |  | 1977 |  |
|  | 111 | IV | 1 | 11 |
|  | Billion dollars |  |  |  |
| GNP, current prices | 1,715.6 | 1,749.8 | 1,806.8 | 1,867.0 |
| Change from previous quarter | 30.2 | 34.2 | 52.0 | 60.2 |
| GNP, 1972 prices | 1,276.5 | 1,284.0 | 1,306.7 | 1,325.5 |
| Change from previous quarter | 8.5 | 7.5 | 22.7 | 18.8 |
|  | 1977 |  | 1978 |  |
|  | III | IV | 1 | $11^{2}$ |
|  |  | Billion | dollars |  |
| GNP, current prices | 1,916.8 | 1,958.1 | 1,992.0 | 2,083.2 |
| Change from previous quarter | 49.8 | 41.3 | 33.9 | 91.2 |
| GNP, 1972 prices | 1,343.9 | 1,354.5 | 1,354.2 | 1,380.5 |
| Change from previous quarter | 18.4 | 10.6 | -. 3 | 26.3 |

## DISPOSABLE PERSONAL INCOME

 $\$$ BIL.90


## Disposable Personal Income ${ }^{1}$

|  | 1976 |  | 1977 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | III | IV | 1 | 11 |
|  | Billion dollars |  |  |  |
| DPI, current prices | 1,192.8 | 1,221.5 | 1,248.0 | 1,285.3 |
| Change from previous quarter | 22.2 | 28.7 | 26.5 | 37.3 |
| DPI, 1972 prices | 891.5 | 900.9 | 904.8 | 918.6 |
| Change from previous quarter | 5.2 | 9.4 | 3.9 | 13.8 |
|  | 1977 |  | 1978 |  |
|  | III | IV | 1 | $11^{2}$ |
|  | Billion dollars |  |  |  |
| DPI current prices | 1,319.1 | 1,359.6 | 1,391.6 | 1,433.3 |
| Change from previous quarter | 33.8 | 40.5 | 32.0 | 41.7 |
| DPI, 1972 prices | 931.9 | 949.6 | 952.1 | 959.9 |
| Change from previous quarter | 13.3 | 17.7 | 2.5 | 7.8 |
| ${ }^{1}$ Seasonally adju | annual rat | es. ${ }^{2}$ Prelim | inary. |  |

## GENERAL ECONOMY

Disposable income of consumers has more than doubled since the late 1960's. Incomes have generally increased faster than expenditures for food, except in 1974-75. Expenditures for services, on the other hand, have for many years increased at a quicker rate than income, and this trend continued in early 1978.

The share of after-tax income spent for food
is holding about steady in 1978 at a little more than 16 percent. Worldwide, the U.S. share compares favorably, holding its own among European countries, but based on 1975 data, being surpassed by Canada.

Unemployment in the past year has declined to about 6 percent compared with the recession peak of nearly 9 percent.

INCOME AND EXPENDITURES
\$ BIL.


Consumer disposable income does not include interest paid by consumers and personal transfer payments to foreigners.
Source: U.S. Department of Commerce, seasonally adjusted annual rates.
Income and Expenditures

|  | $\begin{gathered} 1976 \\ \text { avg. } \end{gathered}$ | $\begin{aligned} & 1977 \\ & \text { avg. } \end{aligned}$ | $1978{ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 | $11^{2}$ |
|  | Billion dollars |  |  |  |
| Disposable personal income (DPI) |  |  |  |  |
| income (DPI) | 1,184.4 | 1,303.0 | 1,359.1 | 1,433.3 |
| Consumer disposable |  |  |  |  |
| income | 1,158.2 | 1,273.4 | 1,259.1 | 1,399.8 |
| Expenditures | 1,090.2 | 1,206.5 | 1,276.7 | 1,324.9 |
| Food ${ }^{3}$ | 194.5 | 212.0 | 224.0 | 232.0 |
| Other goods | 404.7 | 445.3 | 460.9 | 485.8 |
| Services | 491.0 | 549.2 | 591.8 | 607.1 |
| Savings | 68.0 | 66.9 | 82.4 | 75.8 |
| Other outlays ${ }^{4}$ | 26.2 | 29.6 | 32.5 | 33.9 |
|  | Percent |  |  |  |
| Food expenditures as percentage of DPI | 16.4 | 16.3 | 16.1 | 6.2 |

${ }^{1}$ Quarterly data, seasonally adjusted annual rates. ${ }^{2}$ Preliminary. ${ }^{3}$ Excludes alcoholic beverages. ${ }^{4}$ Includes interest paid by consumers and personal transfer payments to foreigners.

SHARE OF AFTER-TAX INCOME SPENT ON FOOD

PERCENT


1975 data. Canada and United States include nonalcoholic beverages. West
Germany includes alcoholic and nonalcoholic beverages.
Source: U.N. National Accounts of Statistics and National Sources.

REASONS FOR UNEMPLOYMENT


[^8]
## CONSUMER PRICES

The Consumer Price Index for Urban Wage Earners and Clerical Workers was 195.1 in June 1978, or 7.3 percent higher than a year earlier. Between 1967 and 1972, the index for food prices advanced more slowly than the all-items index. The rapid food price increases of 1973 and 1974, however, moved the food index ahead of the all-items index, and early 1978 food price
increases have further widened the gap.
Prices for food consumed away from home have increased more rapidly than prices for food at home, except during periods of rapid food price increases, when the indexes have moved together. Consumers, on average, are spending a greater share of their food dollars away from home than they were 10 years ago.

## CHANGE IN CONSUMER FOOD PRICES

\% OF 1967



1978 June index. Source: Bureau of Labor Statistics.

## Change in Consumer Food Prices ${ }^{1}$

|  | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | Percent of 1967 |  |  |  |
| All items | 121.3 | 125.3 | 133.1 | 147.7 | 161.2 | 170.5 | 181.5 | 195.1 |
| Food | 118.4 | 123.5 | 141.4 | 161.7 | 175.4 | 180.8 | 192.2 | 212.8 |
| At home | 116.4 | 121.6 | 141.4 | 162.4 | 175.8 | 179.5 | 190.2 | 212.6 |
| Away from home | 126.1 | 131.1 | 141.4 | 159.4 | 174.3 | 186.1 | 200.3 | 214.1 |
| Housing ${ }^{3}$ | 124.3 | 129.2 | 135.0 | 150.6 | 166.8 | 177.2 | 189.6 | 203.9 |
| Apparel and upkeep | 119.8 | 122.3 | 126.8 | 136.2 | 142.3 | 147.6 | 154.2 | 159.9 |
| Medical care | 128.4 | 132.5 | 137.7 | 150.5 | 168.6 | 184.7 | 202.4 | 219.0 |
| Transportation | 118.6 | 120.0 | 123.8 | 137.3 | 150.6 | 165.5 | 177.2 | 186.6 |

[^9]Source: Bureau of Labor Statistics.

## CONSUMER PRICES

The indexes for hospital semiprivate rooms and operating room charges have been the fastest rising CPI components in the last 10 years. The overall index for medical care has risen faster than the all-items index, although medical items such as drugs and prescriptions have had more moderate increases.

Energy prices-especially those for fuel oil
and coal-have risen rapidly since the 1973-74 oil embargo. Prices for gas and electricity, and for gasoline, have also risen faster than many index items. New car prices have increased moderately, but auto repairs and insurance costs have risen faster. Price advances for services have outpaced those for nondurable and durable commodities.

## CHANGE IN CONSUMER PRICES


\% OF 1967



Fuel oil, coal and gas, and electricity are included in housing index, and gasoline is included in transportation index. Annual averages except June 1978.
Source: Unrevised Consumer Price Index, Bureau of Labor Statistics

## CONSUMER PRICES

Retail food prices in 1978 wil! average about 10 percent above a year ago, the sharpest increase since 1974. Red meat prices, which had declined slightly during the preceding 2 years, have figured heavily in the overall price rise. Tight supplies and higher prices for red meat have also contributed to price increases for poultry, despite record broiler output. Dairy prices
have also seen moderate increases
Smaller supplies of several fresh produce items have contributed to sharp rises in fruit and vegetable prices. Prices for most other crop foods have also gone up, reflecting higher costs for major ingredients as well as higher processing and marketing charges.

FOOD PRICES: RETAIL AND FARM VALUE


Farm value of U.S.-produced farm foods. 1978 preliminary.

Food Price Changes

|  | 1975 | 1976 | 1977 | 1978 |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | Percent of 1967 |  |  |  |  |
| Farm value $^{2}$ | 187.7 | 177.8 | 178.1 | 206.0 |  |
| Wholesale $^{3}$ | 186.0 | 178.9 | 186.8 | 206.0 |  |
| Retail $^{3}$ | 175.4 | 180.8 | 192.2 | 211.0 |  |
| Retail, by food group: |  |  |  |  |  |
| $\quad$ Meat | 177.8 | 178.2 | 174.2 | 205.0 |  |
| $\quad$ Poultry | 162.4 | 155.7 | 156.7 | 172.0 |  |
| $\quad$ Eggs | 157.8 | 172.4 | 166.9 | 163.0 |  |
| $\quad$ Dairy products | 156.7 | 169.3 | 173.9 | 185.0 |  |
| Fruits and vegetables: |  |  |  |  |  |
| $\quad$ Fresh | 166.2 | 170.2 | 193.4 | 216.0 |  |
| $\quad$ Processed | 178.3 | 183.0 | 188.8 | 210.0 |  |
| Cereal and bakery | 184.8 | 180.6 | 183.5 | 199.0 |  |
| Fats and oils | 198.6 | 173.7 | 191.4 | 209.0 |  |

${ }^{1}$ Preliminary. ${ }^{2}$ Prices received by farmers for food commodities. ${ }^{3}$ All foods, Bureau of Labor Statistics. ${ }^{1}$ Includes butter. ${ }^{5}$ Fats and oils, excluding butter.

RETAIL PRICES OF SELECTED CROP PRODUCTS


Fruits and vegetables includes fresh and processed
1978 preliminary. Source: Bureau of Labor Statistics

## RETAIL PRICES OF SELECTED LIVESTOCK PRODUCTS



## CONSUMER PRICES

During the seventies, food prices have risen more slowly in the United States than in nearly any other country-a 6-percent increase in food prices during 1976/77.

Almost half the 1978 increase in grocery store food prices here at home is coming from a 15 -percent increase in farm prices. About twofifths of the increase will result from higher
marketing charges and about one-tenth from higher prices for fish and imported foods. This is in sharp contrast to 1977, when fish and imported foods accounted for two-thirds of the rise and marketing charges for the other third, while returns to farmers held steady.

## PERCENTAGE INCREASES IN FOOD PRICES, 1970-77



## CHANGES IN RETAIL FOOD PRICES



[^10]
## CONSUMER PRICES

The cost of food at home for a family of four (two adults and two children, ages 12-19) in June 1978 ranged from $\$ 47.40$ per week at the thrifty level to $\$ 92.00$ at the liberal level. These costs assume that all food is purchased at the store and prepared at home. The thrifty plan is used to set the coupon allotment for food stamps.

Meat, poultry, and fish items in meals usually cost the most. One way to find good buys is to compare the cost of amounts that provide equal protein. A 3 -ounce serving of cooked chicken, turkey, fish, or lean meat provides one-third of a day's protein for a man. However, well over a serving of certain meats and some alternates are required for the same amount of protein.

FAMILY'S WEEKLY FOOD COST
DOLLARS


All meals at home or taken from home. USDA low-cost food plan, June 1978.

Family's Weekly Food Cost ${ }^{1}$

|  | Thrifty plan | Lowcost plan | Moderate cost plan | Liberal plan |
| :---: | :---: | :---: | :---: | :---: |
|  | Dollars |  |  |  |
| Couple, 20-54 years | 26.20 | 34.30 | 43.00 | 51.60 |
| Couple, 20-54 years with: |  |  |  |  |
| Child, 1-5 years | 31.80 | 41.40 | 51.80 | 62.00 |
| 2 children, 1-5 years | 36.80 | 47.60 | 59.50 | 71.20 |
| 2 children, 6-11 years | 44.20 | 57.30 | 72.00 | 86.30 |
| 2 children, 12-19 years | 47.40 | 61.40 | 76.80 | 92.00 |
| Child, 15-19 years | 37.70 | 49.10 | 61.40 | 73.70 |
| Couple, 55 years and over | 23.50 | 30.60 | 37.90 | 45.30 |

' All meals at home or taken from home, U.S. average; June 1978 data.

## COST OF 1⁄3 OF A DAY'S PROTEIN, MEATS AND MEAT ALTERNATIVES

aVg. Retail prices in u.S. cities


[^11]
## HOUSING

The Consumer Price Index for housing increased 7.9 percent between June 1977 and June 1978. Indexes for homeownership and for fuels increased more than average, while indexes for rent, utilities, furnishings, and operation increased less than average. In 1977, the median sales price of houses in the United States was \$48,800-up 94 percent since 1971.

HOUSING COSTS


1978 data for June. Home ownership includes home purchase, mortgage interest,
taxes, insurance, maintenance, and repairs. Source: Bureau of Labor Statistics

There was a major increase in the inventory of townhouses and mobile homes between 1970 and 1976-especially in rural areas. Nevertheless, single-family homes are still the most prominent type of housing structure available, except for renter occupied housing in urban areas where structures of two or more units predominate.

INCREASE IN SALES PRICES OF HOUSES, 1971-77


Source Bureau of Census

CHANGE IN HOUSING TYPES, 1970-76
URBAN


## FOOD MARKETING COSTS

Rising food costs during the past 5 years have been the result of both higher farm values of food products and widening farm-retail marketing spreads. In 1978, farm value is expected to average about 15 percent above a year ago and account for about half the retail cost rise. Marketing spreads will probably average 7 to 8 percent higher in 1978.

The proportion of retail cost accounted for by farm value in 1978 is expected to average 39 percent for the market basket of farm foods. In general, farmers receive more of the retail price for animal products than for crops, because animal products usually require more inputs and thus have higher farm values.

## FARMER'S SHARE OF THE MARKET-BASKET DOLLAR

CENTS
Poultry and 54 eggs 60

Meat 56 products 55

Dairy 46 products 50
Market 39 basket 39
Fats and 28 oils 36

Fruits and 27 vegetables 25
Bakery and 17 cereal products 13

Foods from U.S. farms.

WHERE THE FARM FOOD DOLLAR GOES
PERCENT OF RETAIL COST


Share of dollar consumers spent in retail food stores for market basket of domestic farm-food products. 1978 preliminary.

RETAIL FOOD COSTS, FARM VALUE, AND MARKETING SPREAD


For a market basket of farm foods. 1978 preliminary.

Where the Farm Food Dollar Goes

|  | 1971 | 1972 | 1973 | 1974 |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Billion dollars |  |  |  |  |
| Consumer expenditures | 114.7 | 118.8 | 136.4 | 151.3 |  |
| Marketing bill | 79.3 | 79.7 | 85.4 | 95.6 |  |
| Farm value | 35.4 | 39.1 | 51.0 | 55.7 |  |
|  | 1975 | 1976 | 1977 | $1978^{1}$ |  |
|  |  | Billion dollars |  |  |  |
|  | 164.2 | 178.8 | 186.4 | 206.0 |  |
| Consumer expenditures | 109.3 | 121.2 | 128.9 | 140.0 |  |
| Marketing bill | 54.9 | 57.6 | 57.5 | 66.0 |  |
| Farm value |  |  |  |  |  |
| Preliminary. |  |  |  |  |  |

## FOOD MARKETING COSTS

The marketing bill is an estimate of the total charges by marketing firms for transporting, processing, and distributing foods originating on U.S. farms. In 1977, the bill was $\$ 129$ billion, or about two-thirds of consumer expenditures for farm foods.

Labor is the biggest cost incurred by firms marketing farm-food products, accounting for

46 percent of the marketing bill in 1977. Labor's share has increased over the past decade, reflecting rising wages and employment in some food industries. Food containers and packaging materials are the second largest cost, followed by rail and truck transportation.

## WHAT MAKES UP THE FARM-FOOD MARKETING BILL



Transportation is intercity rail and truck. Corporate profits are before taxes. Other includes utilities, fuel, promotion, local hired transportation, insurance, etc. 1977 preliminary.

## MARKETING BILL, FARM VALUE, AND

 EXPENDITURES FOR FARM FOODS

For domestic farm foods purchased by civilian consumers for consumption both at home and away from home. 1978 preliminary.

What Makes Up the Farm-Food Marketing Bill

|  | 1975 | 1976 | $1977^{1}$ |
| :---: | :---: | :---: | :---: |
|  | Billion dollars |  |  |
| Total bill | 109.3 | 121.2 | 128.9 |
| Labor ${ }^{2}$ | 48.5 | 53.8 | 59.8 |
| Packaging materials | 13.4 | 15.0 | 16.2 |
| Rail and truck transportation ${ }^{3}$ | 8.3 | 9.5 | 10.0 |
| Corporate profits before taxes | 7.9 | 7.9 | 8.5 |
| Business taxes ${ }^{4}$ | 4.4 | 4.8 | 5.1 |
| Depreciation | 3.2 | 3.5 | 3.7 |
| Rent (net) | 2.8 | 3.2 | 3.5 |
| Advertising | 2.4 | 2.7 | 2.8 |
| Repairs, bad debts, contributions | 1.8 | 2.0 | 2.1 |
| Interest (net) | 1.4 | 1.5 | 1.6 |
| Other ${ }^{\text {s }}$ | 15.2 | 17.3 | 15.6 |

[^12]The Farm-Food Market Basket ${ }^{1}$

|  | 1975 | 1976 | 1977 | $1978{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Percent of 1967 |  |  |  |
| Retail cost | 174 | 175 | 179 | 198 |
| Farm value ${ }^{3}$ | 188 | 178 | 178 | 206 |
| Farm-retail spread ${ }^{4}$ | 165 | 174 | 180 | 194 |
| Share of retail cost: Percent |  |  |  |  |
|  |  |  |  |  |
| Farm | 41 | 38 | 38 | 39 |
| Marketing | 59 | 62 | 62 | 61 |
| ${ }^{1}$ Revised to adapt to weighting structure and retail price in dexes for domestically produced farm foods from the new Con sumer Price Index for all urban consumers (CPI-U) published by the Bureau of Labor Statistics. Market basket represents all food originating on U.S. farms sold in retail food stores. ${ }^{2}$ Preliminary ${ }^{3}$ Payment to farmers for equivalent quantities of food product less allowance for byproducts. ${ }^{4}$ It is an estimate of the charge made by marketing firms for assembly, processing, transpor tation, and distribution; difference between retail cost and farm value. |  |  |  |  |

## FOOD MARKETING COSTS

By type of business, marketing functions performed by retailers account for 27 percent of the marketing bill; processors, 26 percent; restaurants and other away-from-home eating places, 24 percent; wholesalers, 15 percent; and transportation, 8 percent.

Increases in farm-retail price spreads and the food marketing bill are largely due to inflation
in the costs of inputs used in marketing food products. In recent years, substantial cost increases have occurred for nearly every inputparticularly labor and energy-related items.

White pan bread illustrates the impact of marketing charges on the retail price of highly processed foods-baking and distribution costs have accounted for most of the bread price rise.

FOOD MARKETING COSTS BY TYPE OF BUSINESS


CONSUMER'S BREAD PRICE AND WHERE IT GOES


Farm value of wheat and other farm ingredients

PRICES OF INPUTS USED BY FOOD MARKETING FIRMS


Hourly earnings of production workers in food processing and nonsupervisory workers in food wholesaling and retailing.

Consumer's Bread Price and Where It Goes

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | ---: | ---: | ---: | ---: |
|  | Cents/pound |  |  |  |
|  | 34.5 | 36.0 | 35.3 | 35.5 |
| Retail price | 5.8 | 4.6 | 3.4 | 3.1 |
| Retail spread <br> Baker-wholesaler | 17.5 | 21.3 | 23.3 | 2.0 |
| spread | 3.2 | 3.3 | 3.1 | 2.9 |
| Other spreads | 5.5 | 4.5 | 3.8 | 2.7 |
| Farm value: <br> $\quad$ Wheat | 2.5 | 2.3 | 1.7 | 1.8 |

[^13]
## FOOD CONSUMPTION

The Index of Per Capita Food Consumption may increase slightly in 1978 over last year. Increase in total food use is keeping pace with population growth, although per capita food consumption should be about 1 percent below the record 1976 level.

During 1968-77, per capita consumption of coffee and fluid milk declined 37 and 5 percent,
respectively; soft drink intake increased 47 percent, and tea use was up 23 percent.

Sweetener intake changed substantially, too. In 1967, sugar (sucrose) accounted for 85 percent of caloric sweetener use; in 1977, it was 74 percent. Corn sirup, on the other hand, particularly the high fructose type, gained in use.

## POPULATION AND FOOD CONSUMPTION

\% OF 1967


Total food consumption based on retail weight using constant retail prices as index weights. Civilian population on July 1, for 50 States.

Population and Food Consumption

|  | 1975 | 1976 | 1977 | $1978^{1}$ |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  |  | Million |  |  |  |
| Population ${ }^{2}$ | 211.4 | 213.0 | 214.7 | 216.4 |  |
|  |  | Percent of 1967 |  |  |  |
| Population ${ }^{2}$ |  |  |  |  |  |

PER CAPITA CONSUMPTION OF SELECTED BEVERAGES


Tea is in leaf equivalent. Fluid milk is on product-weight basis and includes cream.
Coffee is in green-bean equivalent. 1977 preliminary.
Source: Fluid milk, Food Consumption Prices Expenditures (NEAD); others CED.

## PER CAPITA CONSUMPTION OF CALORIC SWEETENERS BY TYPE



[^14]
## FOOD CONSUMPTION

The small rise expected for 1978 in the Index of Per Capita Food Consumption reflects changes among food groups. A 1-percent gain in consumption of foods from crops will offset a decline in foods from animals. Poultry consumption will be up substantially from last year, reaching record levels. Dairy product and egg consumption will show small gains, although
these increases should be more than offset by declines in beef.

While the index of per capita consumption for crop products is expected to rise due to gains in potatoes, vegetables, melons, and vegetable oils, these gains will be partially offset by declines for fruit and coffee.


Items combined in terms of 1957-59 retail prices.

## Per Capita Food Consumption ${ }^{1}$

|  | 1975 | 1976 | 1977 | $1978^{2}$ |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Percent of 1967 |  |  |  |  |
| All food | 102.1 | 105.7 | 104.6 | 104.9 |  |
|  |  |  |  |  |  |
| Animal products | 99.7 | 104.0 | 103.7 | 103.4 |  |
| $\quad$ Meat | 101.0 | 107.6 | 107.0 | 103.3 |  |
| Poultry | 108.2 | 116.1 | 119.5 | 127.8 |  |
| Eggs | 87.0 | 85.5 | 84.8 | 85.3 |  |
| Dairy ${ }^{3}$ | 98.3 | 99.0 | 98.5 | 100.1 |  |
|  |  |  |  |  |  |
| Crop products | 105.0 | 107.8 | 105.7 | 106.8 |  |
| $\quad$ Fruits and vegetables: ${ }^{4}$ |  |  |  |  |  |
| $\quad$ Fresh | 102.1 | 103.3 | 103.3 | 103.8 |  |
| $\quad$ Processed | 115.3 | 111.8 | 110.4 | 112.0 |  |
| Cereal and bakery | 96.5 | 99.0 | 96.8 | 97.1 |  |
| Vegetable oils | 127.2 | 137.2 | 132.4 | 137.1 |  |

${ }^{1}$ Individual items combined, using 1957-59 prices. ${ }^{2}$ Preliminary. ${ }^{3}$ Includes butter. ${ }^{4}$ Excludes melons, soup, and baby foods, includes potatoes and sweet potatoes.

## PER CAPITA CONSUMPTION OF SELECTED LIVESTOCK PRODUCTS

 \% OF 1967

Items combined in terms of 1957-59 retail prices. Dairy includes butter.
PER CAPITA CONSUMPTION OF SELECTED CROP PRODUCTS


Items combined in terms of 1957-59 retail prices. Processed fruits and vegetables include potatoes and sweet potatoes. Fresh fruits and vegetables exclude melons. Cereal and bakery products include grain.

## FOOD CONSUMPTION

The share of calories provided by protein remained stable over the past 70 years, while a shift occurred between fats and carbohydrates.

In 1909-13, grain products accounted for almost two-fifths of the total calories-more than double the contribution of any other food group. At that time, the meat, poultry, and fish group accounted for one-sixth of the calories;
the fats and oils and sugars and other sweeteners groups each accounted for about one-eighth.

Currently, the meat, poultry, fish group, and the grain products group each provide one-fifth, and the fats and oils group only slightly less. Sugars and other caloric sweeteners now provide one-sixth.


FOOD ENERGY (CALORIES) FROM FOOD GROUPS


## CONSUMER CREDIT

At the end of May 1978, total consumer credit outstanding reached $\$ 228$ billion-an increase of more than 18 percent from a year earlier. This amounted to about $\$ 1,042$ for every man, woman, and child in the United States. Automobiles and personal loans accounted for the most, and home improvements the least.

Interest rates for consumer credit vary, but
generally, credit from commercial banks costs less than credit from finance companies, and credit for mobile homes and new automobiles tends to be cheaper than credit for other items.

Nonbusiness bankruptcy filings declined in 1978 for the third year in a row, returning to the lowest level in 8 years.

CONSUMER INSTALLMENT DEBT PER CAPITA


End of year except May 1978. Other consumer goods include revolving and installment credit. Bank credit cards include check credit. Personal loans are estimated.
Source: Federal Reserve Board.

NONBUSINESS BANKRUPTCIES


Wage-Earner Plans, Chapter 13: court collected. Source: Bankruptcy Division, U.S Courts.

## CONSUMER INTEREST RATES



## CHILDREN

In 1978, the U.S. population of children under 18 numbered 63 million, a decrease of 10 percent from 1970. Children living in traditional husband-wife families declined during that period, while children living with only one parent increased.

While the number of children has decreased, the proportion of children with mothers in the
labor force has increased. The largest increase was among mothers of children under 6 years.

Median family income in 1977 for families with children ranged from $\$ 4,029$ to $\$ 20,357$ depending on family type, race, and labor force participation of the mother.

The majority of all children are cared for by their parents in their own home.

## CHILDREN IN FAMILIES

MIL. CHILDREN
80 -


Children under 18. Excludes 3 million children living in families where a relative other than the parent is head of the household. Also excludes $1 / 2$ million children not living in families. Source: Bureau of Labor Statistics.

## CHILDREN WITH MOTHERS IN THE LABOR FORCE

HUSBAND-WIFE FAMILIES


[^15]Median Family Income for Families With Children ${ }^{1}$

|  | Mother <br> in <br> labor force | Mother <br> not in <br> labor force |
| :--- | ---: | ---: |
| Husband-wife families: | $\$ 20,357$ | $\$ 17,620$ |
| White | 16,102 | 11,017 |
| Black | 16,450 | 12,207 |
| Spanish origin |  |  |
| Families headed by women: | 8,856 | 5,614 |
| White | 6,541 | 4,029 |
| Black | 7,024 | 4,652 |
| Spanish origin |  |  |

${ }^{1} 1977$ data; children under 18 years of age.
Source: Bureau of Labor Statistics.

DAYTIME CARE OF CHILDREN


Cared for by:
Parents in own home
$\square$ Other than parents in own home
© Outside own home

## CHILDREN

The costs of raising a farm child to age 18 in 1977 prices range from around $\$ 27,000$ at the thrifty level to $\$ 88,200$ at the liberal level. These levels correspond to levels of expenditure consistent with USDA food plans.

The annual costs generally rise with the age of the child. No substantial difference in costs by sex shows up until later years when costs for
boys are higher-primarily due to higher transportation costs for teenage boys.

The child's share of family housing is the most costly item, accounting for between 35 and 40 percent, depending on cost level. Food at home and transportation are generally second and third. Costs for clothing and food away from home represent the smallest portion.

## COST OF RAISING FARM CHILDREN

BOYS AND GIRLS, BY AGE


Moderate cost level.

GIRLS, BY COST ITEM


Moderate cost level

BOYS, AT FOUR COST LEVELS \$ THOUS.


## CHILDREN

Clothing budgets for farm children provide cost estimates by age and sex at four cost levels. The levels correspond to levels of expenditure consistent with USDA food plans. At the moderate cost level, annual clothing costs in 1977 ranged from $\$ 92$ to $\$ 281$ for girls, and from $\$ 102$ to $\$ 221$ for boys.

For infants, under and nightwear account for
the greatest proportion of total clothing costs. For other age children, however, outerwear costs are highest, followed by footwear.

For example, in the budget for girls aged 6-9, outerwear costs range from $\$ 23$ at the thrifty level to $\$ 120$ at the liberal level; footwear costs range from $\$ 19$ at the thrifty level to $\$ 49$ at the liberal level.

## COST OF CLOTHING FARM CHILDREN

GIRLS, FOUR LEVELS


1977 costs. Ages 6-9. Other includes under and nightwear, hosiery, hats, and miscellaneous items.

BOYS, MODERATE COST LEVEL


Based on 1977 cost. Ages 6-9

Cost of Clothing Farm Children, Moderate Level, 1977
$\left.\begin{array}{lccccccc} & \text { Total } & \text { Wraps } & \text { Outerwear } & \begin{array}{c}\text { Under and } \\ \text { nightwear }\end{array} & \text { Hosiery } & \text { Footwear } \\ \text { other }\end{array}\right]$

## FOOD AND NUTRITION PROGRAMS

62 Food Assistance
63 Food Stamps
66 School Programs
67 Other Programs


## FOOD ASSISTANCE

USDA expenditures for food assistance have increased substantially since 1969. In fiscal 1978, total USDA cost amounted to about $\$ 9.4$ billion-up about $\$ 0.8$ billion from 1977.

Participation in the Family Food Assistance Programs is closely tied to the unemployment rate. As unemployment rose during the early 1970's, program participation increased sharply.

Since that time, both unemployment and program participation have trended downward.

Some changes in food assistance programs: Food distribution has given way to food stamps, and new programs for the elderly, and for women, infants, and children have evolved.

## USDA FUNDING FOR FOOD ASSISTANCE

\$ BIL
10


1978 preliminary.
UNEMPLOYMENT RATE AND PARTICIPATION IN THE FOOD STAMP PROGRAM


1978 preliminary TO = transition quarter (Jut Sep

PARTICIPANTS IN THE FAMILY FOOD ASSISTANCE PROGRAMS
MIL. PERSONS


1978 preliminary.

## PARTICIPANTS IN WIC PROGRAM

MIL. PERSONS


FISCAL YEAR
TQ $=$ Transition Quarter (July-Sept.). 1978 preliminary. WIC is the special supplemental food program for Women, Infants, and Children.

## FOOD STAMPS

The total value of food stamps issued has increased substantially over the past several years due to both increased participation in the program and periodic adjustments in coupon allotment. Hence, cost of the program to USDA has also increased-to $\$ 5.8$ billion in fiscal 1977. However, cost of the program has leveled off since participation peaked in 1975. USDA cost
includes Federal cost of administering the program as well as matching State funds, printing, production, and employment registrations.

Only about half of the persons receiving food stamps are also receiving public assistance. The big spurt in those not on public assistance but receiving food stamps came with the Supplemental Security Income Program in 1975.

## VALUE OF FOOD STAMPS ISSUED

\$ BIL.


1978 preliminary.

## NUMBER OF PARTICIPANTS IN

 THE FOOD STAMP PROGRAM MIL. PERSONS

USDA COST OF THE FOOD STAMP PROGRAM


[^16]Food stamp participation varies considerably among the seven regions of the Food and Nutrition Service which administers the program. The Mid-Atlantic, Southeast, and Midwest Regions account for more than two-thirds of all participants. And over 30 percent of the total live in the Mid-Atlantic Region alone-which includes Puerto Rico.

About 70 percent of the persons who participate in the food stamp program live in metropolitan areas. Such areas are highly concentrated in the Mid-Atlantic and Midwest Regions. Participants that live in nonmetropolitan areas are most highly concentrated in the Southeast Region, which accounts for about a third of nonmetro participants.

REGIONAL PERCENTAGE DISTRIBUTION OF PERSONS IN THE FOOD STAMP PROGRAM

TOTAL PARTICIPATION


REGIONS

METRO AND NONMETRO


REGIONS

- Puerto Rico.

DISTRIBUTION OF FOOD STAMP PARTICIPANTS BY INCOME LEVEL AND HOUSEHOLD SIZE


## FOOD STAMPS

Food bought with food stamps amounted to about 4.8 percent in fiscal 1978, down from 6 percent 2 years earlier when participation was at a record high. The bonus portion of food stamps accounted for 3 percent. These percentages have increased over time as participation in the program has grown and bonus values have increased.

The food stamp escalator is computed on the
total value of stamps issued, not just on the bonus value of stamps. As a result, average bonus per person has risen faster than the Consumer Price Index for food at home. This has also resulted from the food price rise outpacing incomes.

## U.S. FOOD AT HOME BOUGHT WITH FOOD STAMPS

## PERCENT



Percent of total expenditures for food at home. 1978 preliminary.

## AVERAGE MONTHLY

 FOOD STAMP BONUSPER PERSON


FISCAL YEAR
1978 preliminary. Bonus is portion of food stamp allotment paid by USDA.

## CHANGES IN FOOD PRICES AND FOOD STAMP BONUS

\% OF 1972


Changes in Food Prices and Food Stamp Bonus'

|  | 1973 | 1974 | 1975 |
| :---: | :---: | :---: | :---: |
| CPI, for food at home (index) ${ }^{2}$ | 128.6 | 153.9 | 168.9 |
| As percentage of 1972 | 108.2 | 129.5 | 142.2 |
| Food stamp bonus (dollars) | 14.60 | 17.61 | 21.40 |
| As percentage of $1972$ | 108.2 | 130.6 | 158.8 |
|  | 1976 | 1977 | $1978{ }^{3}$ |
| CPI, for food at home (index) ${ }^{2}$ | 179.3 | 186.5 | 200.2 |
| As percentage of 1972 | 150.9 | 157.0 | 168.5 |
| Food stamp bonus (dollars) | 23.93 | 24.36 | 26.22 |
| As percentage of 19/2 | 177.5 | 180.7 | 194.5 |

[^17]
## SCHOOL PROGRAMS

USDA's contributions to school programs are geared to food price increases and changes in participation. Contributions, in fact, have gone up somewhat faster than prices. Also, the increased contributions have been due to the rising number of free or reduced-price lunches, for which Federal reimbursements are greater than for paid lunches.

Participation in the National School Lunch Program has increased some in recent years. It was up in fiscal 1977, due to a law bringing Residential Child Care Institutions under the program and also requiring all participating schools to offer reduced-price lunches. Also, more schools now operate the program than in previous years.

## WHO PAYS FOR THE SCHOOL LUNCHES?

\$ BIL.


1978 preliminary.

NUMBER OF CHILDREN IN
NATIONAL SCHOOL LUNCH PROGRAM


[^18]CHANGES IN FOOD COSTS AND USDA CONTRIBUTIONS TO A SCHOOL LUNCH


1978 preliminary. Food costs away from home are from the Consumer Price Index.

## NUMBER OF CHILDREN IN THE SCHOOL BREAKFAST PROGRAM

MIL.


[^19]
## OTHER PROGRAMS

USDA contributed about \$3 billion in cash and food to the Child Nutrition Programs in fiscal 1978. This includes the School Lunch Program, School Breakfast Program, Summer Feeding Program, Special Milk Program, and Child Care Feeding Program. Since 1972, there has been a significant uptrend in costs, as most of the programs have gained more participants
as well as received higher Federal reimbursements due to escalators based on prices of food away from home.

A relatively new program-the Nutrition Program for the Elderly-has expanded quite rapidly since its beginning in 1975. Expenditures have risen from $\$ 1.8$ million a quarter in fiscal 1975 to an estimated $\$ 12.1$ million a quarterin just 12 quarters.

USDA CONTRIBUTIONS TO THE CHILD NUTRITION PROGRAMS \$ BIL. 4 -


1978 preliminary

USDA COST OF THE NUTRITION PROGRAM FOR THE ELDERLY \$ MIL.


NUMBER OF CHILDREN IN THE CHILD CARE AND SUMMER FOOD SERVICE PROGRAMS
MIL.


1978 preliminary.

MILK SERVED IN SPECIAL MILK PROGRAM


## FOREIGN PRODUCTION AND TRADE

69 U.S. Trade
76 World Situation


## U.S. TRADE

Exports of farm products have been important in reducing U.S. trade deficits. In fiscal 1978, agricultural exports exceeded imports by nearly $\$ 13$ billion. This surplus helped offset the more than \$43-billion trade deficit in the nonfarm sector.

Most farm exports-about 94 percent in 1977-are sold commercially, for dollars or
convertible foreign currencies. Ten years ago, Government-financed exports accounted for 19 percent of the total.

During the last 8 years, CCC sales ranged from $\$ 182$ million to $\$ 913$ million. Wheat was the major commodity financed, followed by corn and cotton. CCC-financed exports ranged from 4 to 7 percent of all commercial farm exports.

## U.S. AGRICULTURAL TRADE BALANCE



October-September years. 1977/78 partially estimated.

## U.S. AGRICULTURAL EXPORTS: GOVERNMENT PROGRAMS AND COMMERCIAL SALES



FARM EXPORT SALES AIDED BY CCC CREDIT
\$ BIL.


CCC: Commodity Credit Corporation. Credit terms up to 36 months. 1978 estimated.
U.S. Agricultural Exports: Government Programs and Commercial Sales

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | ---: | ---: | ---: | ---: |
|  | Million dollars |  |  |  |
| Total exports | 21,999 | 21,884 | 22,996 | 23,671 |
| Commercial | 21,140 | 20,456 | 21,555 | 22,178 |
| Government | 859 | 1,428 | 1,441 | 1,493 |

## U.S. TRADE

Although the volume of agricultural exports increased by about two-thirds during 1968-77, the dollar volume more than doubled because of higher prices. Prices peaked in 1974 at 223 percent of the 1967 base, but have declined somewhat since.

Grains and feeds continued to dominate agricultural exports in fiscal 1978. Wheat, feed
grains, and rice were the largest components. Oilseeds and products, primarily soybeans, meal, and oil, remained in second place.
U.S. wheat and corn export prices declined in 1977 because of large U.S. and world harvests. In contrast, soybean prices rose to a record $\$ 7.38$ a bushel in response to the short 1976 U.S. soybean crop.


EXPORT PRICES PAID FOR MAJOR U.S. FARM CROPS
\$ PER METRIC TON


Average export unit values.

U.S. Agricultural Exports by Principal Commodity Groups'

|  | 1975 | 1976 | $1977^{2}$ | $1978{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million dollars |  |  |  |
| Total exports | 21,854 | 22,760 | 24,013 | 26,600 |
| Grains and feeds | 11,561 | 11,920 | 9,895 | 11,400 |
| Oilseeds and products | 4,753 | 4,692 | 6,404 | 7,300 |
| Livestock and products | 1,666 | 2,207 | 2,645 | 2,800 |
| Fruits, nuts, and vegetables | 1,373 | 1,532 | 1,742 | 1,800 |
| Cotton and linters | 1,055 | 919 | 1,538 | 1,600 |
| Tobacco, unmanufactured | 897 | 929 | 1,085 | 1,100 |
| Other | 549 | 561 | 537 | 600 |
| ' October-September mated. | years. | elimina | y. ${ }^{3} \mathrm{Par}$ | lly es |

## U.S. TRADE

Nearly one-third of all U.S. crop production was exported in fiscal 1978, up from about onefourth in 1970. Wheat, rice, soybeans, corn, grain sorghum, cotton, tobacco, and certain fruits and vegetables are among the major export crops.

The largest markets for U.S. farm products in 1977 were Japan, West Germany, Canada,

Holland, and the U.S.S.R. Other important destinations included the United Kingdom, Korea, Italy, Spain, Mexico, and Taiwan.

A high proportion of many U.S. farm products move to foreign markets. In fiscal 1978, over half the rice, sunflower seeds, cattle hides, wheat, and soybeans were exported.

## U.S. EXPORTS FROM HARVESTED ACRES

MIL. ACRES


Exported includes feed required to produce livestock products exported.

## U.S. Exports From Harvested Acres

|  | 1974 | 1975 | 1976 | $1977^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million acres |  |  |  |
| Harvested ${ }^{2}$ | 330 | 336 | 338 | 342 |
| Exported | 99 | 100 | 102 | 107 |
| Food grains | 39 | 40 | 32 | 40 |
| Feed grains ${ }^{3}$ | 21 | 24 | 26 | 26 |
| Oil crops | 28 | 26 | 31 | 32 |
| Cotton | 4 | 4 | 5 | 5 |
| Other crops | 7 | 6 | 8 | 5 |

${ }^{1}$ Preliminary. ${ }^{2}$ Area in 59 principal crops harvested as reported by ESCS-Statistics plus acreages in fruits, tree nuts, and farm gardens. ${ }^{3}$ Includes feed required to produce livestock products exported.

WHERE WE SHIP OUR AGRICULTURAL EXPORTS


1977 data. Adjusted for transshipments through Canada and Western Europe.

PERCENT OF U.S. FARM PRODUCTION EXPORTED
COMMODITIES


Year ending September 30, 1978. partially estimated. Soybeans include bean equivalent of meal and oil.

## U.S. TRADE

The United States played a significant role in 1977 world agricultural trade, which totaled $\$ 150$ billion. U.S. imports ran about 9 percent and exports nearly 16 percent of that value.
U.S. agricultural exports to Asia-the destination second only to Western Europe-topped \$8 billion in 1977. Japan was the major Asian market, followed by Korea and Taiwan. In West

Asia, Iran moved ahead of Israel with its increased wheat and rice purchases. Sharply reduced shipments of wheat to India resulted in a decline in exports to South Asia.

## U.S. SHARE OF WORLD AGRICULTURAL TRADE



U.S. AGRICULTURAL EXPORTS TO ASIA


## U.S. TRADE

Most U.S. agricultural imports come from Latin American countries, including Brazil, Mexico, and Colombia. Asia ranks second regionally, led by Indonesia, the Philippines, and Malaysia. Less developed countries as a group supplied over 70 percent of U.S. farm products in 1977, up from 67 percent a year earlier.

Coffee leads all other types of imported agri-
cultural products in terms of value. Other major items include meat, fruits and vegetables, cocoa, sugar, and rubber.

## WHERE WE GET OUR AGRICULTURAL IMPORTS



## LEADING U.S. AGRICULTURAL

 IMPORTS BY VALUE

Leading U.S. Agricultural Imports by Value ${ }^{1}$

|  | 1977 | 1978 |
| :--- | ---: | ---: |
|  | Million dollars |  |
|  |  |  |
| Coffee and products | 4,383 | 3,600 |
| Meat and products | 1,289 | 1,600 |
| Fruits, nuts, and vegetables | 1,203 | 1,400 |
| Cocoa and products | 877 | 1,300 |
| Sugar and related products | 1,105 | 1,000 |
| Rubber and allied gums | 627 | 700 |
| Wine and beer | 545 | 700 |
| Oilseeds and products | 639 | 500 |
| Tobacco, unmanufactured | 339 | 400 |
| Bananas and plantains | 319 | 300 |
| Dairy products | 301 | 300 |
| Other | 1,755 | 1,900 |
| $\quad$ Total | 13,382 | 13,700 |
|  |  |  |
| 'October-September data. |  |  |

## U.S. TRADE

Over 60 percent of U.S. agricultural exports go to developed countries. The developing countries and centrally planned areas' share in 1977 were 32 and 7 percent, respectively, compared with 30 and 10 percent, respectively, in 1976.
U.S. agricultural exports to the U.S.S.R. rebounded to over \$1.9 billion in fiscal 1978
from about $\$ 1$ billion a year earlier. Corn shipments to supplement animal feed rations accounted for most of the increase, while wheat and soybeans remained near 1977 rates. Farm exports to the U.S.S.R. have fluctuated widely because of their variable weather conditions, but a 5 -year grain agreement should narrow the ranges considerably.

## U.S. AGRICULTURAL EXPORTS TO MAJOR AREAS



Not adjusted for transshipments.
U.S. Agricultural Exports by Major Areas

|  | 1976 | 1977 |
| :--- | ---: | ---: |
|  | Million dollars |  |
| Total exports | 22,996 | 23,671 |
|  |  |  |
| Centrally planned | 2,414 | 1,705 |
| Less developed | 6,835 | 7,383 |
| Developed | 13,747 | 14,583 |

## U.S. AGRICULTURAL EXPORTS TO THE SOVIET UNION


U.S. Agricultural Exports to the Soviet Union '

|  | 1975 | 1976 | 1977 | $1978^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
|  | 596 | 1,853 | 1,063 | 2,090 |
| Total exports | 411 | 446 | 446 | 400 |
| Wheat | 148 | 1,312 | 333 | 1,400 |
| Feed grains | $\left({ }^{3}\right)$ | 60 | 219 | 210 |
| Soybeans | 37 | 35 | 65 | 80 |
| Other |  |  |  |  |
| Million dollars |  |  |  |  |
| $\quad$ ' October-September data; not adjusted for transshipments. |  |  |  |  |
| ${ }^{2}$ Partially estimated. ${ }^{3}$ Less than $\$ 500,000$. |  |  |  |  |

## U.S. TRADE

The European Community's nine member countries represent the largest single foreign market for U.S. farm products. About one-third of the commodities shipped are regulated by the Community's Common Agricultural Policy provisions, which require payment of variable import levies when prices are below desired European support levels. For example, while
U.S. export prices for wheat and corn declined in 1977, EC threshold-or minimum import prices-for these commodities rose.

Farm exports to the 13 OPEC members exceeded $\$ 2$ billion in 1977/78, up sharply from $\$ 1.6$ billion in fiscal 1977. The previous record reached $\$ 1.7$ billion in 1974/75. Grains continued to account for the bulk.

## U.S. AGRICULTURAL EXPORTS TO OPEC NATIONS



OPEC: Organization of Petroleum Exporting Countries. Years ending September 30. 1977/1978 partially estimated.
U.S. AGRICULTURAL EXPORTS TO THE EUROPEAN COMMUNITY \$ BIL.


Years ending September 30. 1977/78 partially estimated. Data not adjusted for transshipments. Variable import levy commodities are those regulated by EC's common agricultural policy.

COMMON MARKET MINIMUM IMPORT PRICES
\$/MT
250 -


1977 data. EC: European Community. Threshold price is the minimum import price at which the EC allows grain to enter a member country.
U.S. Agricultural Exports to the European
Community

|  | 1974 | 1975 | 1976 | 1977 |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Million dollars |  |  |  |  |
| Total | 5,336 | 5,535 | 5,854 | 7,099 |  |
| Variable levy | 1,560 | 2,210 | 2,275 | 2,324 |  |
| Nonvariable levy | 3,776 | 3,326 | 3,578 | 4,774 |  |
| Not adjusted for transshipments. |  |  |  |  |  |

## WORLD SITUATION

World production of agricultural commodities over the past 25 years has increased at an annual compound rate of 2.5 percent, but only 0.9 percent per capita. Production in 1977 was up nearly 1.5 percent above the previous year, but stayed about the same on a per capita basis.

In the United States, 1977 agricultural production rose 3.9 percent over the 1955-77 trend,
while production in other developed countries fell 5.8 percent below this trend. Since 1955, however, U.S. per capita production at a compound rate rose more slowly- 0.7 percent, compared with 1.4 percent in other developed countries.

## CHANGES IN AGRICULTURAL PRODUCTION



Other developed countries include Canada, Europe, Japan, U.S.S.R., Republic of South Africa, Australia, and New Zealand.
Developing countries include South and Central America, Africa (except Republic of South Africa), Asia (except Japan, the Peoplés Republic of China, and Vietnam).

Changes in Agricultural Production


## WORLD SITUATION

Agricultural production in developing countries is increasing at a combined annual rate of 2.9 percent, while in the developed countries, it's increasing by only 2.4 percent. On a per capita basis, the rate is 1.3 percent for the developed countries and 0.4 percent for developing countries. Too, population continues to increase faster in the developing than in the
developed countries.
Ending stocks of wheat and coarse grains in 1977/78 are forecast to rise by about 14 million metric tons, reflecting favorable weather for grain production worldwide. The share of stocks held in the United States is also expected to rise above 45 percent.

## CHANGES IN AGRICULTURAL PRODUCTION



WORLD CARRYOVER STOCKS OF WHEAT AND COARSE GRAIN


World Carryover Stocks of Wheat and Coarse Grain

|  | $1971 / 72$ | 1972/73 | 1973/74 | 1974/75 |  |
| :---: | ---: | ---: | ---: | ---: | :---: |
| Million metric tons |  |  |  |  |  |
| World | 161.2 | 125.4 | 129.1 | 117.5 |  |
| U.S. | 73.4 | 48.0 | 31.0 | 27.3 |  |
| Other | 87.8 | 72.0 | 98.0 | 90.2 |  |
|  | Million metric tons |  |  |  |  |
|  | $1975 / 76$ | $1976 / 77$ | $1977 / 78$ | $1978 / 79^{1}$ |  |
|  |  |  |  |  |  |
|  | 114.4 | 175.0 | 175.9 | 185.2 |  |
| World | 35.4 | 60.3 | 75.1 | 73.1 |  |
| U.S. | 79.0 | 114.7 | 100.8 | 112.1 |  |

## COMMODITY TRENDS

79 Livestock
84 Dairy
88 Poultry
92 Commodity Stocks
93 Wheat
96 Rice
99 Feed Grains

104 Grain Transportation
105 Fats and Oils
109 Fibers
116 Vegetables
120 Fruit
123 Tropical Products
126 Tobacco


## LIVESTOCK

The inventory of cattle and calves on farms and ranches peaked in 1975, with approximately 132 million head. Caught in a cost-price squeeze, producers have since been liquidating herds. Dry weather and poor grazing conditions in many parts of the country also contributed to this sharp downturn in the inventory. The January 1 , 1979, inventory is expected to decline further.

Reflecting the heavy slaughter associated with herd liquidation, beef and veal production hit a record in 1976. Production declined in 1977 and 1978, however, as an increase in the slaughter of heavier, grain-fed cattle failed to offset reductions in grass-fed beef production.

## CATTLE ON FARMS, JANUARY 1



Beef cows and dairy cows are those that have calved. Other dairy stock includes estimate of replacement heifer calves

Cattle on Farms, January 1

|  | 1975 | 1976 | 1977 | $1978^{1}$ |
| :--- | ---: | ---: | ---: | ---: |
|  | Million head |  |  |  |
| Cattle and calves $^{2}$ | 132.0 | 128.0 | 122.8 | 116.3 |
| Beef cows | 45.7 | 43.9 | 41.4 | 38.8 |
| Other beef animals | 66.9 | 65.1 | 62.6 | 58.8 |
| Dairy cows | 11.2 | 11.1 | 11.0 | 10.9 |
| Other dairy stock ${ }^{3}$ | 8.2 | 7.9 | 7.8 | 7.8 |

${ }^{1}$ Preliminary. ${ }^{2}$ The 1979 forecast is $111-112$ million head. ${ }^{3}$ Includes estimate of replacement heifer calves.

## CHANGE IN CATTLE NUMBERS AND BEEF PRODUCTION

PERCENT ( $1930-39=100$ )


Cattle Numbers, Beef and Veal Production, and U.S. Population ${ }^{1}$

|  | 1940 | 1950 | 1960 | 1970 | 1974 | 1975 | 1976 | 1977 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | $1930-39=100$ |  |  |  |  |

[^20]
## LIVESTOCK

Marketings of fed cattle approached 27 million head during 1972 and were record large. But sharply declining cattle prices in late 1973 and 1974, along with escalating grain prices resulted in a scaling down of the cattle feeding industry. Marketings in 1975 at 20.5 million head represented a 9 -year low. Record large grain crops in 1976, 1977, and 1978 have stimulated feeding.

The cyclical expansion in hog numbers which began the winter of 1976 will continue into 1979. Heavy death losses and increased disease the last 2 years have limited the buildup in market hog numbers. The small increase in pork production during the year kept hogs profitable, thereby assuring continued increases in pig crops.

## CATTLE ON FEED AND MARKETINGS



Figures are million head, quarterly data.

FED CATTLE MARKETED, BY FEEDLOT CAPACITY


Data are for 23 States.
Source: Cattle on Feed report, Economics, Statistics, and Cooperatives Service, USDA.

MARKET HOGS AND PIG CROPS


Pig crops - Dec.-Feb., Mar.-May, June-Aug., Sept.-Nov. Market hogs on farms Dec. 1 previous year, March 1, June 1, Sept. 1. Dec. 1.

Pig Crops, Hog Slaughter, and Pork Production

|  | 1975 | 1976 | 1977 | 1978 ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million head |  |  |  |
| Pig crops | 71.2 | 84.4 | 86.2 | 87.3 |
| Spring | 35.5 | 42.2 | 43.0 | 42.3 |
| Fall | 35.7 | 42.2 | 43.2 | 45.0 |
| Hog slaughter | 69.9 | 75.0 | 78.4 | 78.7 |
|  | Million pounds |  |  |  |
| Pork production | 11,779 | 12,688 | 13,247 | 13,385 |

## LIVESTOCK

The inventory of sheep and lambs and production of lamb and mutton continue their longterm downtrend, although the rate has slowed. Predator control-a major problem for sheep producers-has been a significant factor in this trend.

Per capita beef and veal consumption has trended upward for many years, while pork
consumption has been edging downward. Slight movements around these trends reflect cyclical changes in beef and pork production. Per capita beef and veal consumption reached a record high in 1976 at 133.3 pounds, but is now declining. Lamb and mutton consumption have continued to drop, reflecting declining production.

## SHEEP NUMBERS AND LAMB AND MUTTON PRODUCTION



1978 production forecast.

Sheep Numbers and Lamb and Mutton Production

|  | 1930 | 1940 | 1950 | 1960 | 1970 | 1975 | 1976 | 1977 | 1978 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million head |  |  |  |  |  |  |  |  |
| Sheep and lambs on farms | 51.6 | 52.1 | 29.8 | 33.2 | 20.4 | 14.5 | 13.3 | 12.8 | 12.4 |
|  | Million pounds |  |  |  |  |  |  |  |  |
| Lamb and mutton production | 825 | 876 | 597 | 768 | 551 | 410 | 371 | 351 | 310 |

MEAT CONSUMPTION PER PERSON


Meat Consumption Per Person

|  | 1975 | 1976 | 1977 | $1978{ }^{1}$ |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Pounds |  |  |  |  |
| Total per capita |  |  |  |  |  |
| meat consumption | 182.4 | 194.7 | 193.0 | 187.0 |  |
| Beef | 120.1 | 129.3 | 125.9 | 120.3 |  |
| Veal | 4.2 | 4.0 | 3.9 | 3.0 |  |
| Lamb and mutton | 2.0 | 1.9 | 1.7 | 1.6 |  |
| $\quad$ Pork | 56.1 | 59.5 | 61.5 | 62.1 |  |
| $\quad{ }^{1}$ Forecast. |  |  |  |  |  |
| Data published currently in Livestock and Meat | Situation |  |  |  |  |
| (ESCS). |  |  |  |  |  |

## LIVESTOCK

Cattle prices have risen sharply this year after being at low levels the past few years. Hog prices have also risen, but not as sharply as cattle. These higher prices reflect lower beef supplies, only slightly higher pork supplies, and a strong consumer demand for meat.

Retail beef and pork prices have generally trended upward since the early seventies, boosted
by rising consumer income and a preference for more red meat in the diet. Lower supplies of red meats coupled with strong consumer demand for meats pushed retail beef and pork prices sharply higher in 1978.

## LIVESTOCK PRICES RECEIVED BY FARMERS



Livestock Prices Received by Farmers

|  | Jan. | Feb. | Mar. | Apr. | May | June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dollars/cwt. |  |  |  |  |  |
| Cattle: |  |  |  |  |  |  |
| 1977 | 32.20 | 33.20 | 33.80 | 35.30 | 36.30 | 34.00 |
| 1978 | 37.20 | 39.90 | 43.80 | 47.30 | 50.30 | 51.30 |
| Hogs: |  |  |  |  |  |  |
| 1977 | 38.10 | 39.40 | 37.20 | 36.00 | 40.70 | 42.00 |
| 1978 | 43.90 | 47.90 | 46.80 | 44.80 | 47.80 | 47.70 |
| Lambs: ${ }^{\text {L }}$ |  |  |  |  |  |  |
| 1977 | 48.30 | 49.60 | 49.10 | 50.80 | 55.00 | 50.90 |
| 1978 | 61.00 | 62.60 | 67.70 | 64.20 | 67.20 | 62.80 |
|  | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|  | Dollars/cwt. |  |  |  |  |  |
| Cattle: |  |  |  |  |  |  |
| 1977 | 34.90 | 34.50 | 34.70 | 35.10 | 34.30 | 35.50 |
| 1978 | 49.80 | 48.80 | 51.60 |  |  |  |
| Hogs: |  |  |  |  |  |  |
| 1977 | 44.80 | 42.80 | 40.30 | 39.90 | 37.80 | 41.50 |
| 1978 | 45.20 | 47.50 | 47.60 |  |  |  |
| Lambs: |  |  |  |  |  |  |
| 1977 | 50.60 | 49.10 | 51.30 | 52.60 | 52.40 | 56.90 |
| 1978 | 58.70 | 58.90 | 64.50 |  |  |  |

CATTLE PRICES


RETAIL MEAT PRICES


[^21]
## LIVESTOCK

Exports of all livestock products in 1977 were up 11 percent over 1976 to $\$ 2.2$ billion. The big export earners were lard and tallow, valued at $\$ 588$ million; hides and skins, $\$ 578$ million; and red meat, $\$ 374$ million.
U.S. imports of red meat totaled 2.4 billion pounds (carcass-weight equivalent) during 1977, or down 7 percent from 1976. Of the meat
imported, beef and veal accounted for about 2 billion pounds, with pork, lamb and mutton, and goat meat making up the rest.

## U.S. EXPORTS OF LIVESTOCK PRODUCTS



## U.S. Exports of Livestock Products

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | ---: | ---: | ---: | ---: |
|  |  | Million dollars |  |  |
|  | $1,576.5$ | $1,391.1$ | $1,984.4$ | $2,194.5$ |
| Total exports |  |  |  |  |
|  | 152.6 | 268.8 | 397.1 | 374.2 |
| Red meats, excluding | 154.1 | 112.9 | 132.4 | 105.7 |
| $\quad$ offals |  |  |  |  |
| Live animals |  |  |  |  |
| Animal byproducts: | 40.4 | 23.6 | 35.4 | 39.4 |
| $\quad$ Lard | 540.0 | 331.8 | 403.7 | 548.6 |
| $\quad$ Tallow | 337.2 | 291.6 | 518.0 | 577.7 |
| $\quad$ Hides and skins | 113.1 | 109.9 | 151.6 | 157.6 |
| $\quad$ Variety meats (offals) | 28.1 | 37.4 | 49.6 | 48.5 |
| $\quad$ Casings and mohair | 124.5 | 115.1 | 175.7 | 208.3 |
| Furskins | 86.5 | 100.0 | 121.1 | 134.7 |

U.S. IMPORTS OF RED MEATS

BIL. LB.


Carcass-weight equivalent.
U.S. Imports of Red Meats ${ }^{1}$

|  | 1974 | 1975 | 1976 | 1977 |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | Million pounds |  |  |  |
| Imports | 2,166 | 2,248 | 2,606 | 2,424 |  |
| Beef and veal | 1,646 | 1,782 | 2,101 | 1,963 |  |
| Pork | 488 | 439 | 469 | 439 |  |
| Mutton and goat | 9 | 2 | 2 | 1 |  |
| Lamb | 18 | 25 | 34 | 21 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Carcass-weight equivalent. |  |  |  |  |
|  |  |  |  |  |  |

Sharply higher feed prices during 1973-75 caused milk output per cow to deviate from what had been a very stable longrun trend. However, improved milk-feed price relationships in 1976-77, coupled with a marked slowing in the drop in number of milk cows, resulted in a jump in total milk production. Total production in 1978 dropped slightly as a sharper drop in cow
numbers offset near stable output per cow.
Prices of dairy feed concentrates rose much more rapidly than did milk prices in 1973-74 and caused a substantial deterioration in milkfeed relationships. Since then, rising milk prices, with lower feed prices in 1977 and 1978, have lifted the milk-feed price ratio.

## MILK PRODUCTION, NUMBER OF COWS, AND MILK PER COW

\% of 1967


Milk Production, Number of Cows, and Milk Per Cow

|  | 1975 | 1976 | 1977 | $1978{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Milk production: |  |  |  |  |
| Billion pounds | 115.3 | 120.3 | 123.0 | 121.7 |
| Percentage of 1967 | 97.1 | 101.3 | 103.6 | 102.5 |
| Milk cows on farms: ${ }^{2}$ |  |  |  |  |
| Million | 11.1 | 11.1 | 11.0 | 10.8 |
| Percentage of 1967 | 82.8 | 82.8 | 82.1 | 80.6 |
| Milk production per cow: |  |  |  |  |
| Pounds | 10,350 | 10,879 | 11,194 | 11,230 |
| Percentage of 1967 | 116.9 | 122.9 | 126.5 | 126.9 |
| ${ }^{1}$ Forecast. ${ }^{2}$ Average excluding heifers not yet | mber on . | farms | during | the ye |

MILK-FEED PRICE RELATIONSHIPS


Ration value refers to concentrate ration fed to milk cows. Milk-feed price ratio is the pounds of ration equal in value to 1 pound of milk sold to plants. 1978 forecast.

Milk-Feed Price Relationships

|  | 1975 | 1976 | 1977 | $1978{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Milk-feed price ratio: |  |  |  |  |
| Pounds | 1.40 | 1.53 | 1.57 | 1.70 |
| Percentage of 1967 | 89.7 | 98.1 | 100.6 | 109.0 |
| Ration value, milk-selling areas: |  |  |  |  |
| Dollars per cwt. | 6.25 | 6.31 | 6.21 | 6.10 |
| Percentage of 1967 | 193.5 | 195.4 | 192.3 | 188.9 |
| Milk, price: ${ }^{2}$ |  |  |  |  |
| Dollars per cwt. | 8.75 | 9.66 | 9.72 | 10.50 |
| Percentage of 1967 | 174.3 | 192.4 | 193.6 | 209.2 |

After peaking in 1963, supplies of milk and dairy products trended downward through 1975, mostly due to lower milk production. Use also declined as Government donations were reduced. The 1976-78 increase in supplies was not matched by a rise in total use, however, and Government stocks increased through 1977 before declining slightly in 1978.

During 1966-75, changes in cash receipts from sales of milk and cream closely followed the rise in farm milk prices, since the quantity of milk marketed was fairly stable. The 1976 and 1977 increase in milk marketings and the 1978 price increase helped boost cash receipts.

## MILK SUPPLY, USE, AND STOCKS



Stocks as of December 31. 1978 forecast.

Milk Supply, Use, and Stocks

|  | 1975 | 1976 | 1977 | 1978 |
| :--- | ---: | ---: | ---: | ---: |
|  | Billion pounds |  |  |  |
| Supply $^{2}$ | 122.7 | 126.1 | 130.6 | 132.3 |
| $\quad$ Production | 115.3 | 120.3 | 123.0 | 121.7 |
| Imports | 1.7 | 1.9 | 2.0 | 2.0 |
|  |  |  |  |  |
| Use | 119.0 | 120.4 | 122.3 | 124.3 |
| $\quad$ Commercial and farm | 116.8 | 119.9 | 119.3 | 121.6 |
| $\quad$ Domestic donations ${ }^{3}$ | 2.3 | .5 | 3.0 | 2.7 |
| Government exports $^{4}$ | $\left({ }^{5}\right)$ | $\left(^{5}\right)$ | $\left(^{5}\right)$ | $\left(^{5}\right)$ |
|  |  |  |  |  |
| Stocks, Dec. 31 | 3.8 | 5.7 | 8.6 | 7.9 |
| $\quad$ Commercial | 3.7 | 5.3 | 4.9 | 4.8 |
| Government | .1 | .4 | 3.7 | 3.1 |

${ }^{1}$ Forecast. ${ }^{2}$ Includes beginning commercial and Government stocks. ${ }^{3}$ Includes donations and transfers to the military.
${ }^{4}$ Includes shipments to territories and exports under the Food for Peace Program. ${ }^{5}$ Less than 50 million pounds.

Data published currently in Dairy Situation (ESCS).

## MILK MARKETINGS, PRICES,

 AND CASH RECEIPTS

1978 forecast.

Milk Marketings, Prices, and Cash Receipts

|  | 1975 | 1976 | 1977 | $1978{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Farm sales of milk and cream: ${ }^{2}$ |  |  |  |  |
| Billion pounds | 112.3 | 117.3 | 120.1 | 119.0 |
| Percentage of 1967 | 98.9 | 103.3 | 105.7 | 104.8 |
| Average return per100 pounds: |  |  |  |  |
|  |  |  |  |  |
| Dollars | 8.84 | 9.74 | 9.80 | 10.60 |
| Percentage of 1967 | 174.7 | 192.5 | 193.7 | 209.5 |
| Cash receipts: |  |  |  |  |
| Million dollars | 9,922 | 11,429 | 11,776 | 12,590 |
| Percentage of 1967 | 172.8 | 199.0 | 205.1 | 219.3 |

Computed from data published in Milk Production, Disposition, and Income (ESCS).

## DAIRY

Cheese sales have jumped over the past decade as a result of rising consumer incomes and changing lifestyles. Consumers have shifted toward lower-fat products for both health and price considerations.

Government purchases under the price support program fell to fairly low leveis during 1973-76. Increases in milk output during 1976-

77 without a corresponding growth in commercial use, however, resulted in much larger USDA purchases in 1977. Purchases declined in 1978 as a result of a slight decline in milk output, coupled with a rapid growth in commercial use.

## CHANGES IN PER CAPITA DAIRY PRODUCT SALES, 1967-77



Changes in Per Capita Dairy Product Sales ${ }^{1}$

|  | 1967 | 1972 | 1977 | $\begin{gathered} \text { 1967/77 } \\ \% \text { change } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Pounds |  |  | Percent |
| Fluid whole |  |  |  |  |
| Low-fat fluid |  |  |  |  |
| Fluid cream ${ }^{3}$ | 6.1 | 5.3 | 5.6 | -8.2 |
| Butter | 4.9 | 4.1 | 4.0 | -18.4 |
| American cheese | 6.0 | 7.6 | 9.0 | +50.0 |
| Other cheese | 3.7 | 5.3 | 6.9 | +86.5 |
| Evaporated and |  |  |  | +6.7 |
| Evaporated and condensed milk | 9.0 | 5.9 | 4.3 | -52.2 |
| Ice cream | 18.1 | 17.7 | 17.8 | -1.7 |
| Ice milk | 6.9 | 7.7 | 7.5 | +8.7 |
| Sherbet | 1.5 | 1.6 | 1.5 | 0 |
| Nonfat dry milk | 5.0 | 4.1 | 3.2 | -36.0 |

[^22]
## MILK SOLIDS REMOVED FROM THE MARKET BY CCC PROGRAMS



Deliveries to the Commodity Credit Corporation after domestic unrestricted sales. 1978 forecast

Milk Solids Removed From the Market by CCC Programs ${ }^{1}$

|  | 1975 | 1976 | 1977 | $1978^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Milkfat: |  |  |  |  |
| $\quad$ Million pounds | 77.7 | 46.8 | 231.3 | 125 |
| Percentage of marketings | 1.9 | 1.1 | 5.3 | 2.9 |
|  |  |  |  |  |
| Solids-not-fat: |  |  |  |  |
| $\quad$ Million pounds | 405.6 | 167.5 | 497.4 | 300 |
| Percentage of marketings | 4.2 | 1.7 | 4.8 | 2.9 |
| $\quad{ }^{1}$ Purchases, delivery basis, after domestic unrestricted sales. |  |  |  |  |
| ${ }^{2}$ Forecast. |  |  |  |  |
|  |  |  |  |  |
| Data published currently in Dairy Situation (ESCS). |  |  |  |  |

## DAIRY

In recent years, U.S. trade in dairy products has been fairly stable at low levels. Except for the temporary supplemental quotas authorized in 1973-74, the quota system has held imports to low levels. Since domestic prices have generally been high relative to Oceanic or subsidized European products, commercial exports have remained small, and substantial exports have
generally occurred only when food aid donations were large. Cheese has accounted for more than 85 percent of total dairy imports.

## DAIRY IMPORTS AND EXPORTS




Dairy Imports and Exports


[^23]
## POULTRY

Egg production in 1978 will be up about 2 percent from 1977, as both the average number of layers and output per hen increased. This is the second year in a row that output has gained, after declining for 5 consecutive years. Output in the first half of 1978 was up 3.5 percent but may only match 1977 levels by the end of 1978. Increased egg production in 1978 will result
in egg prices averaging below a year earlier. Egg prices were sharply lower early in the year but rose above 1977 levels in the second half of 1978.

## EGGS: CHANGES IN PRODUCTION AND FARM PRICES



1978 forecast.

Eggs: Changes in Production and Farm Prices ${ }^{1}$

|  | 1975 | 1976 | $1977^{2}$ | $1978^{3}$ |
| :--- | ---: | ---: | ---: | ---: |
| Egg production: <br> Million dozen <br> Percent change from <br> year earlier | 5,382 | 5,376 | 5,403 | 5,525 |
| Farm prices: <br> Cents per dozen <br> Percent change from <br> $\quad$ year earlier | -1.4 | -0.1 | 0.5 | 2.3 |
| ${ }^{1}$ Simple average. ${ }^{2}$ Preliminary. ${ }^{3}$ Forecast. |  | 59.7 | 54.2 | 53.0 |

EGGS: RATE OF LAY, PRODUCTION, AND NUMBER OF LAYERS


Eggs: Rate of Lay, Production, and Number of Layers

|  | 1975 | 1976 | $1977^{2}$ | $1978^{3}$ |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Million |  |  |  |  |
| Egg production | 64,586 | 64,517 | 64,837 | 66,300 |  |
| Eggs per layer ${ }^{4}$ | 233 | 235 | 236 | 238 |  |
| Number of layers | 278 | 274 | 275 | 279 |  |
|  |  |  |  |  |  |
|  | 93.2 | 93.1 | 93.5 | 95.6 |  |
| Egg production | 105.2 | 106.4 | 106.5 | 107.6 |  |
| Rate of lay | 88.4 | 87.3 | 87.7 | 88.9 |  |

[^24]
## POULTRY

Broiler production continued to expand in 1978 and exceeded 1977 output by 7 to 8 percent. Producer returns were good, and output would have been larger except for a shortage of hatching eggs in the spring and poor hatchability in late summer and the fall. And despite gains in broiler meat output, prices moved well above 1977 levels.

Turkey production hit a new record in 1978, up 5 to 6 percent from 1977. The largest percentage increase over 1977 came in the first half of 1978. Second-half output would have been larger had more hatching eggs been available. Turkey prices rose sharply and will show their highest annual average in recent history. Higher meat prices have been largely responsible.

## BROILERS: CHANGES IN PRODUCTION AND FARM PRICES



Broilers: Changes in Production and Farm Prices ${ }^{1}$

|  | 1975 | 1976 | $1977^{2}$ | $1978{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
| Broiler production: |  |  |  |  |
| Million pounds, liveweight | 11,096 | 12,517 | 12,992 | 13,800 |
| Percent change from year earlier | -2.0 | 12.8 | 3.8 | 6.2 |
| Farm prices: ${ }^{4}$ |  |  |  |  |
| Cents per pound | 26.3 | 23.6 | 23.6 | 27.0 |
| Percent change from year earlier | 22.3 | 10.3 | 0 | 14.4 |
| 1 December previous year through November currentPreliminary. ${ }^{3}$ Forecast. ${ }^{4}$ Weighted average. |  |  |  |  |

## TURKEYS: CHANGES IN PRODUCTION AND FARM PRICES



1978 forecast.

Turkeys: Changes in Production and Farm Prices

|  | 1975 | 1976 | $1977^{1}$ | $1978^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Turkey production: <br> Million pounds, live- <br> weight <br> Percent change from <br> year earlier | 2,277 | 2,605 | 2,548 | 2,700 |
| Farm prices: ${ }^{3}$ <br> Cents per pound <br> Percent change from <br> year earlier$\quad 34.8$ | 31.7 | 35.5 | 42.0 |  |
| ${ }^{1}$ Preliminary. ${ }^{2}$ Forecast. ${ }^{3}$ Weighted average. |  |  |  |  |

## POULTRY

Per capita consumption of eggs in 1978 may show the first gain since 1971. Consumption of all eggs (shell and processed) is expected to total around 1 egg per person above the 272 eggs consumed in 1977.

Chicken and turkey meat consumption will be up about 3.5 pounds per person from the record 54.1 pounds in 1977. Chicken consump-
tion is expected to be up over 3 pounds per person, with broilers accounting for all the increase. Turkey consumption in 1978 may gain a third of a pound because of increased production and a drawdown in cold storage stocks.


| Per Capita Consumption of Poultry and Eggs |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | $1977^{1}$ | $1978{ }^{2}$ |
|  | Pounds |  |  |  |  |  |  |  |  |
| Total poultry meat | 48.5 | 48.9 | 51.0 | 49.2 | 50.0 | 49.2 | 52.5 | 54.1 | 57.6 |
| Chicken | 40.5 | 40.4 | 42.0 | 40.7 | 41.1 | 40.3 | 43.3 | 44.9 | 48.1 |
| Broilers | 36.9 | 36.7 | 38.4 | 37.4 | 37.5 | 37.2 | 40.4 | 41.7 | 45.0 |
| Other | 3.6 | 3.8 | 3.6 | 3.3 | 3.6 | 3.4 | 2.9 | 3.2 | 3.1 |
| Turkey | 8.0 | 8.4 | 9.0 | 8.5 | 8.9 | 8.6 | 9.2 | 9.2 | 9.5 |
|  | Number |  |  |  |  |  |  |  |  |
| Eggs | 310 | 312 | 305 | 291 | 286 | 280 | 274 | 272 | 273 |
| Shell | 276 | 275 | 269 | 260 | 252 | 249 | 241 | 235 | 237 |
| Processed ${ }^{3}$ | 34 | 37 | 36 | 31 | 34 | 31 | 33 | 37 | 36 |

## POULTRY

Exports of eggs and chicken in 1977 advanced from the year before, but turkey exports dropped off sharply. During the first 8 months of 1978, turkey exports showed a small decline from 1977, while egg and chicken exports remained above last year. Egg exports will likely remain above 1977 during the balance of 1978. However, chicken and turkey exports for all of

1978 will likely be below a year earlier.

## U.S. EXPORTS OF POULTRY PRODUCTS

## EGGS



Shell eggs plus shell-egg equivalent of egg products.

## CHICKEN



## TURKEY

MIL. LB

U.S. Exports of Poultry Products

|  | 1974 | 1975 | 1976 | 1977 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | Million pounds |  |  |  |
| Chicken:' <br> Broilers <br> Other | 115 | 138 | 287 | 313 |  |
| Turkey |  |  |  |  |  | equivalent of egg products.

## COMMODITY STOCKS

Poor weather conditions led to a surge in demand for crops in the early 1970's as stocks of major commodities dropped to low levels. But crop production has been large during the past couple of years-both in the United States and in the rest of the world-and stocks have been rebuilt. A roundup: wheat stocks holding fairly steady; rice stocks recovering; corn stocks
building; soybean stocks dropping; and cotton stocks heading down.

Weather has continued to favor U.S. grain crops, boosting prospective 1978 production to over 260 million metric tons, thus continuing the uptrend underway since 1975. Disappearance in 1977/78 fell short of the 1977 crop and increased carryover stocks about 12 million tons.

## STOCKS OF MAJOR FARM COMMODITIES




MIL. BALES


CROP YEARS
Crop years beginning: Wheat July 1, 1960-64, June 1, 1965 to date; cotton and rice, August 1; soybeans, September 1; corn and other tobacco, October 1, 1979 forecast.

Stocks of Major Farm Commodities ${ }^{1}$

|  | 1976 | 1977 | $1978^{2}$ | $1979^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Wheat (bil. bu.) | .67 | 1.11 | 1.17 | 1.13 |
| Rice (mil. cwt.) | 36.9 | 40.5 | 27.5 | 47.6 |
| Cotton (mil. bales) | 3.7 | 2.9 | 5.1 | 5.4 |
| Corn (bil. bu.) | .40 | .88 | 1.11 | 1.07 |
| Soybeans (mil. Ibs.) | 245 | 103 | 125 | 145 |
| Tobacco (bil. Ibs.) | 3.3 | 3.5 | 3.5 | 3.5 |

[^25]TOTAL GRAIN SUPPLY AND DISAPPEARANCE


Year beginning October 1 for corn and sorghum: June 1 for oats, barley, wheat, and rye; and August 1 for rice. Supply includes imports. 1977 estimated.
1978 projected.

Total Grain Supply and Disappearance ${ }^{1}$

|  | 1975 | 1976 | 1977 | $1978^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Million metric tons |  |  |  |  |
| Supply | 276.8 | 294.9 | 324.4 | 338.3 |
| $\quad$ Carryover | 27.6 | 37.1 | 62.1 | 73.7 |
| Production | 248.6 | 257.3 | 261.8 | 264.3 |
| Imports | .5 | .6 | .4 | .4 |
|  |  |  |  |  |
| Disappearance | 239.6 | 232.6 | 250.6 | 254.6 |
| $\quad$ Domestic use | 155.1 | 153.2 | 161.5 | 168.5 |
| Exports | 84.5 | 79.4 | 89.1 | 86.6 |

[^26]
## WHEAT

Growers cut back their 1978 wheat acreage in response to the set-aside and graze-out programs. Thus, the 1978 wheat crop dropped below the 2-billion-bushel level for the first time in 3 years. With the reduced crop, the total 1978/79 wheat supply will be below last year's record 3.1 billion bushels, though remaining the second largest.

Exports in 1977/78 recovered from the drop
in 1976 and surpassed 1 billion bushels. Indications point to a 1978/79 export year probably in excess of a billion bushels for the sixth time in the last 7 years.

## WHEAT ACREAGE, YIELD, AND PRODUCTION



Wheat Acreage, Yield, and Production

|  | 1975 | 1976 | $1977^{1}$ | $1978^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Harvested acreage: |  |  |  |  |
| $\quad$ Million acres | 69.4 | 70.8 | 66.2 | 56.5 |
| Percentage of 1959-61 | 134 | 137 | 128 | 109 |
|  |  |  |  |  |
| Yield per harvested acre: | 30.6 | 30.3 | 30.6 | 31.6 |
| $\quad$ Bushels |  |  |  |  |
| Percentage of 1959-61 | 128 | 127 | 128 | 132 |
|  |  |  |  |  |
| Production: | 2,122 | 2,142 | 2,026 | 1,788 |
| $\quad$Million bushels <br> Percentage of 1959-61 | 172 | 174 | 164 | 145 |$\quad$| ' Preliminary. ${ }^{2}$ September indications. |
| :--- |

## WHEAT SUPPLY AND DISAPPEARANCE




Supply includes imports. 1977 estimated. 1978 projected.

Wheat Supply and Disappearance ${ }^{1}$

|  | 1975 | 1976 | $1977^{2}$ | $1978{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million bushels |  |  |  |
| Supply | 2,559 | 2,810 | 3,140 | 2,993 |
| Carryover | 435 | 665 | 1,112 | 1,174 |
| Production | 2,122 | 2,142 | 2,026 | 1,817 |
| Imports ${ }^{4}$ | 2 | 3 | 2 | 2 |
| Disappearance | 1,894 | 1,698 | 1,966 | 1,845 |
| Domestic use | 721 | 748 | 842 | 745 |
| Food ${ }^{5}$ | 559 | 553 | 569 | 565 |
| Seed | 99 | 92 | 80 | 80 |
| Feed ${ }^{6}$ | 63 | 103 | 193 | 100 |
| Exports ${ }^{4}$ | 1,173 | 950 | 1,124 | 1,100 |
| ${ }^{1}$ Year beginning June 1. ${ }^{2}$ Preliminary. ${ }^{3}$ Projected. ${ }^{4}$ Imports |  |  |  |  |
| and exports include flour and other products in wheat equiva- |  |  |  |  |
| lents. ${ }^{5}$ Used for food in the United States, U.S. territories, and |  |  |  |  |
| by the military. ${ }^{6}$ Residual; approximates feed use and includes |  |  |  |  |

## WHEAT

In response to the reduced 1978 wheat crop, strong export demand, orderly producer marketing and large farmer owned reserve stocks, new crop wheat prices were supported at nearly $\$ 1$ per bushel above 1977 harvest-time loan level prices.

Following last year's record production, world wheat output declined about 8 percent in

1977/78, resulting from downturns in area and yield. Unfavorable weather caused production problems in the Soviet Union, People's Republic of China, many North African and West Asian countries, Argentina, and Mexico. Production in Canada was down from 1976 but still above the levels of recent years.

## Wheat prices and loan rate

 \$ PER BU.

Year beginning June 1. 1977 and 1978 preliminary.

## WHERE THE WORLD'S WHEAT IS GROWN

MIL. METRIC TONS 500


1977 preliminary.

Where World's Wheat Is Grown

|  | 1974 | 1975 | 1976 | 1977 |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Million metric tons |  |  |  |  |
| Total production | 356.5 | 349.4 | 412.7 | 381.5 |  |
|  |  |  |  |  |  |
| By country: | 83.9 | 66.2 | 96.9 | 92.0 |  |
| U.S.S.R. | 48.9 | 58.1 | 58.4 | 55.1 |  |
| United States |  |  |  |  |  |
| Other 4 majors: | 13.3 | 17.1 | 23.5 | 19.7 |  |
| Canada | 6.1 | 15.0 | 16.1 | 17.4 |  |
| France | 11.4 | 12.6 | 11.0 | 5.2 |  |
| Argentina | 49.8 | 52.7 | 11.8 | 9.4 |  |
| Australia |  |  | 51.7 |  |  |

Wheat Prices, Loan Rate, Value of Farm Production, and Government Payments ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Dollars/bushel |  |  |  |
| Loan rate | 1.37 | 1.37 | 2.25 | 2.25 |
| Kansas Citv, No. 1, HRW ordinary protein | 4.20 | 3.74 | 2.88 | 2.72 |
| Season average farm price | 4.09 | 3.56 | 2.73 | 2.31 |
|  | Million dollars |  |  |  |
| Value of farm production | 7,287 | 7,535 | 5,851 | 4,677 |
| Government payments: |  |  |  |  |
| Price support ${ }^{3}$ | 0 | 0 | 0 | 0 |
| Crop disaster | 102 | 51 | 145 | 139 |
| Total | 102 | 51 | 145 | 139 |
| Total crop value | 7,389 | 7,586 | 5,996 | 4,816 |

[^27]
## WHEAT

Reduced wheat crops in many importing countries, plus quality problems in others, led to a 10 -million-ton increase in world trade in 1977/ 78. The Soviet Union and People's Republic of China accounted for much of the increase. Other regions importing more included Western Europe, where high quality wheat was needed for milling purposes, and North African and

West Asian countries, where production was down. In the western hemisphere, low production in Mexico led to larger wheat imports.

With increased world trade, U.S. wheat and flour exports were sharply above 1976/77 and near the record 1975/76 levels. Exports by Canada and Australia were also at near record levels.

## WHO EXPORTS THE WORLD'S WHEAT AND FLOUR



Year beginning July 1 includes wheat equivalent of flour and products. 1977 preliminary.

Who Exports the World's Wheat and Flour ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Million metric tons |  |  |  |  |
| Total exports | 68.6 | 72.5 | 67.2 | 77.2 |  |
| Originating country: |  |  |  |  |  |
| U.S. ${ }^{3}$ | 28.0 | 31.5 | 25.4 | 31.1 |  |
| Canada | 11.2 | 12.1 | 12.7 | 16.0 |  |
| Australia | 8.2 | 7.9 | 8.6 | 10.5 |  |
| Argentina | 2.2 | 3.2 | 5.6 | 2.5 |  |
| All others: | 8.1 | 9.1 | 6.2 | 7.6 |  |
| France | 4.0 | .5 | 1.0 | 1.0 |  |
| U.S.S.R. | 6.9 | 8.2 | 7.7 | 8.5 |  |
| Other | 19.0 | 17.8 | 14.9 | 17.1 |  |

${ }^{1}$ Flour in terms of wheat equivalent. ${ }^{2}$ Preliminary. ${ }^{3}$ Includes wheat, flour, bulgur and rolled wheat for relief, and the following products: durum flour and semolina, macaroni and noodles, and bulgur wheat. All in terms of wheat-grain equivalent.

Where U.S. Wheat and Flour Exports Go ${ }^{1}$
$1974 \quad 1975 \quad 1976 \quad 1977^{2}$

Million metric tons

| Total exports | 28.0 | 31.5 | 26.1 | 31.1 |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Receiving country: | 3.7 | 9.0 | 6.3 | 6.9 |  |  |  |
| $\quad$ Total Europe | 2.2 | 3.7 | 2.0 | 1.8 |  |  |  |
| EC $^{3}$ | 17.2 | 13.4 | 11.7 | 11.4 |  |  |  |
| Total Asia | 3.1 | 3.3 | 3.2 | 3.3 |  |  |  |
| $\quad$ Japan | 4.5 | 5.7 | 3.8 | 6.5 |  |  |  |
| Western Hemisphere | 2.7 | 3.4 | 4.3 | 6.3 |  |  |  |
| Other |  |  |  |  |  |  |  |
| Grain equivalent. ${ }^{2}$ Preliminary. ${ }^{3}$ EC-9. |  |  |  |  |  |  |  |

Details may not add to total because of independent rounding.

## RICE

Responding to strong prices last spring, U.S. producers expanded 1978 rice plantings by a third. The result was a record 1978 crop estimated at 137 million cwt., 38 percent larger than last year's outturn. Despite carryin stocks being down a third, the large harvest will be offsetting, and total 1978/79 supplies will reach a new high of 160-170 million cwt.

Since 1974, annual rice exports have been above 50 million cwt., but very strong foreign sales in 1977/78 jumped exports to an all-time high of 73 million cwt. Even with an increase in 1978/79 disappearance, carryover stocks should also reach a new high of 50 million cwt.

RICE ACREAGE, YIELD, AND PRODUCTION


Rice Acreage, Yield, and Production ${ }^{1}$


ROUGH RICE SUPPLY AND DISAPPEARANCE


Rough Rice Supply and Disappearance ${ }^{1}$

|  | 1975 | 1976 | $1977^{2}$ | $1978^{3}$ |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Million cwt. |  |  |  |  |
| Supply | 135.5 | 152.6 | 139.8 | 164.6 |  |
| $\quad$ Carryover | 7.1 | 36.9 | 40.5 | 27.4 |  |
| Farm production | 128.4 | 115.6 | 99.2 | 137.2 |  |
| $\quad$ Imports |  |  |  |  |  |
|  | $\left({ }^{4}\right)$ | .1 | .1 | $\ldots$ |  |
| Disappearance | 96.8 | 108.3 | 110.4 | 111.0 |  |
| $\quad$ Domestic | 40.3 | 42.7 | 37.6 | 44.0 |  |
| $\quad$ Exports | 56.5 | 65.6 | 72.8 | 67.0 |  |
|  |  |  |  |  |  |
| Statistical discrepancies ${ }^{5}$ | +1.8 | +3.8 | +2.0 | $\ldots$ |  |

${ }^{1}$ Data apply only to major rice-producing States. Milled rice converted to rough basis at annual extraction rate. ${ }^{2}$ Preliminary. ${ }^{3}$ Projected. ${ }^{4}$ Less than $50,000 \mathrm{cwt}$. ${ }^{5}$ Results from loss, waste, the variation in conversion factors, and the lack of data on other uses.

## RICE

World rice production set a new record in 1977/78-about 20 million tons above 1976/77, and approximately 2 percent above the 1975/76 record. Most of the increase over 1976/77 can be attributed to the large increase in India's production. Production in Bangladesh was up, cutting its import needs, but down in Indonesia, where imports increased. Compared to 1976/77,
smaller production in Thailand and Burma resulted in smaller exports from those two countries.

A record-setting export pace during 1977/78 pushed farm prices up 40 percent, but record supplies and little prospect for expanded demand suggest the 1978/79 average farm prices will be down from last year's $\$ 9.43$ per cwt.

WHERE WORLD'S RICE IS GROWN

$1977 / 78$ preliminary. Figures are for rough rice.

Where World's Rice Is Grown

|  | 1974/75 | 1975/76 | 1976/77 | 1977/78 |
| :---: | :---: | :---: | :---: | :---: |
|  | Million metric tons |  |  |  |
| Total production | 329.9 | 353.3 | 340.4 | 362.4 |
| By country: |  |  |  |  |
| Mainland |  |  |  |  |
| China | 120.0 | 119.0 | 118.0 | 126.5 |
| India | 59.4 | 74.3 | 65.3 | 74.3 |
| Major other 74.3 |  |  |  |  |
| Asia: |  |  |  |  |
| Japan | 15.4 | 16.5 | 14.7 | 16.4 |
| Pakistan | 3.5 | 3.9 | 3.7 | 4.3 |
| Indonesia | 22.5 | 22.3 | 22.7 | 22.8 |
| Other | 80.1 | 84.6 | 86.0 | 88.8 |
| Other producers: |  |  |  |  |
| Western Hemisphere | 17.5 | 14.7 | 12.7 | 17.9 |
| All other | 11.5 | 18.0 | 17.3 | 11.4 |

## ROUGH RICE FARM PRICE AND LOAN RATES



## RICE

World rice trade set a new record in 1977over a million tons above the 1976 level. Much of the need for increased imports rose in Indonesia, as it attempted to cover its production shortfall. Traditional importers such as Bangladesh and Sri Lanka also imported more in 1977. Record exports by both the United States and Thailand largely accounted for increased exports.

In 1977, U.S. rice exports were about 10 percent above the level of the previous two years. Continued growth in African markets plus larger exports to Europe and Western Hemisphere countries more than offset the decline in exports to Asia.

WORLD EXPORTS OF RICE BY COUNTRY


In terms of milled rice. 1977 preliminary.

| World Exports of Rice by Country ${ }^{1}$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Million metric tons |  |  |  |  |
|  |  |  |  |  |
| Total exports |  |  |  |  |
| Originating country: |  |  |  |  |
| U.S. |  |  |  |  |
| Burma |  |  |  |  |
| Thailand |  |  |  |  |
| Other |  |  |  |  |

${ }^{1}$ In terms of milled. ${ }^{2}$ Preliminary.

WHERE WE SHIP U.S. RICE EXPORTS
MIL. METRIC TONS


In terms of milled rice. 1977 preliminary.

Where We Ship U.S. Rice Exports ${ }^{1}$

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | ---: | ---: | ---: | ---: |
|  |  | 1,000 metric tons |  |  |
| Total exports | $1,702.0$ | $2,070.3$ | $2,044.6$ | $2,269.6$ |
|  |  |  |  |  |
| By receiving |  |  |  |  |
| country: | $1,170.9$ | $1,600.0$ | $1,225.7$ | $1,081.3$ |
| Asia | 151.1 | 167.8 | 237.3 | 516.2 |
| Africa | 203.0 | 205.3 | 441.4 | 502.4 |
| Europe | 145.6 | 152.2 | 253.0 | 297.7 |
| EC-9 | 165.8 | 94.1 | 133.4 | 161.3 |
| Western Hemisphere | 11.2 | 3.1 | 6.8 | 8.4 |
| Others |  |  |  |  |
|  |  |  |  |  |

## FEED GRAINS

Feed grain acreage remained fairly level during the 1960's, while generally favorable weather, improved technology, and planting of only the most fertile land boosted both yields and production. But a series of production setbacks led to the lifting of Government controls on U.S. acreage. In the late 1970's, large crops have surpassed utilization, and feed grain prices have
dropped to near their national average loan rates.
Fewer beef cattle numbers, only slightly more output of pork, and record large production of poultry meat suggest that, on balance, feeding of concentrates in 1978/79 will continue below the peak of the early 1970's. However, generally favorable feeding margins should encourage generous feeding rates per animal.

## FEED GRAIN ACREAGE AND PRODUCTION



1978 based on August intentions.

Feed Grain Acreage and Production ${ }^{1}$

|  | 1975 | 1976 | $1977^{2}$ | $1978{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million acres |  |  |  |
| Acreage harvested for grain | 104 | 106 | 107 | 102 |
|  | Short tons |  |  |  |
| Yield per harvested acre | 1.95 | 2.01 | 2.08 | 2.02 |
|  | Million short tons |  |  |  |
| Production | 204 | 213 | 222 | 223 |
| ${ }^{1}$ Corn, grain sorg on August indications. | oats, an | barley. | relimin | $\text { . }{ }^{3} \text { Base }$ |

FEED CONCENTRATES FED


Feed fed to livestock and poultry. 1977 figures are preliminary; 1978 based on August indications.

Feed Concentrates Fed to Livestock and Poultry ${ }^{1}$

|  | 1975 | 1976 | $1977^{2}$ | $1978{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million short tons |  |  |  |
| Total concentrates fed | 166.0 | 165.6 | 170.8 | 177.2 |
| Feed grains | 127.5 | 123.9 | 129.7 | 137.4 |
| Corn | 100.6 | 100.4 | 105.0 | 112.0 |
| Sorghum | 14.1 | 12.0 | 12.6 | 13.2 |
| Oats and barley | 12.8 | 11.5 | 12.1 | 12.2 |
| Wheat | 1.6 | 7.2 | 3.9 | 2.1 |
| Rye | . 2 | . 2 | . 3 | . 1 |
| Byproducts ${ }^{4}$ | 36.7 | 34.3 | 36.9 | 37.6 |
|  | Million |  |  |  |
| Grain-consuming animal units (GCAU) | 74.6 | 75.9 | 77.9 | 80.0 |
|  | Short tons |  |  |  |
| Concentrates fed per |  |  |  |  |
| GCAU | 2.23 | 2.18 | 2.19 | 2.22 |

[^28]
## FEED GRAINS

Large crops helped keep prices of feed grains and protein feed at comparatively stable levels during 1977/78. Protein feed prices remained high, compared with those of feed grains, as demand for protein surged to a record level because of good feeding returns from hogs and broilers-major users of protein.

With larger supplies and good feeding margins,
U.S. livestock and poultry producers fed a record volume of protein feed in 1977/78. Soybean meal led, with an increase of 16 percent. Large supplies and continued favorable returns from feeding suggest another year of strong demand for protein feed, although the increase may be less dramatic than in 1977/78.

FEED GRAIN AND HIGH-PROTEIN FEED PRICES


Prices for feed grains are those received by farmers. High-protein feed prices are wholesale at principal markets. 1977 preliminary. Year beginning October 1.

Feed Grain and High-Protein Feed Prices

|  | 1974 | 1975 | 1976 | 1977 |
| :---: | :---: | :---: | :---: | :---: |
|  | Percent of 1967 |  |  |  |
| Feed grains ${ }^{2}$ | 251 | 220 | 182 | 177 |
| High-protein feeds ${ }^{3}$ | 171 | 193 | 252 | 213 |
| Oilseed meals ${ }^{4}$ | 168 | 190 | 252 | 208 |
| Animal proteins ${ }^{5}$ | 179 | 204 | 269 | 244 |
| Grain proteins ${ }^{6}$ | 180 | 196 | 221 | 190 |
| ${ }^{1}$ Preliminary, October-August average. ${ }^{2}$ Prices received by farmers for corn, oats, barley, and grain sorghum. ${ }^{3}$ Wholesale prices of 11 principal high-protein feeds. ${ }^{4}$ Wholesale prices of soybeans, cottonseed, linseed, copra, and peanut meal. ${ }^{5}$ Wholesale prices of meat meal, tankage, and fishmeal. ${ }^{6}$ Wholesale prices of gluten feed, gluten meal, and distillers' and brewers' dried grains. |  |  |  |  |

HIGH-PROTEIN FEED USE, SOYBEAN MEAL EQUIVALENT


Grain proteins - gluten feed and meal; brewer and distiller dried grains. Other animal proteins - tankage, meat meal, and milk products. Other oilseed meals cottonseed, linseed, peanut, and copra

High-Protein Feed Use ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | Million short tons |  |  |  |
| Total use | 18.7 | 21.4 | 19.8 | 22.3 |  |
|  |  |  |  |  |  |
| Oilseed meal | 14.3 | 17.0 | 5.6 | 18.1 |  |
| Soybean meal | 12.6 | 15.6 | 14.1 | 16.3 |  |
| Cottonseed meal $^{\text {Other }}{ }^{3}$ | 1.5 | 1.0 | 1.2 | 1.6 |  |
| Animal protein |  |  |  |  |  |

## FEED GRAINS

The 1978 corn crop is forecast to be record large for the fourth consecutive year. With another increase in carryover stocks this fall, supplies for the 1978/79 season will be large again. And although domestic use and exports will continue to be heavy because of strong demand, stocks will still likely grow.

Since grain supplies here and abroad have
more than caught up with demand, corn prices to U.S. farmers have plunged from their peak in the fall of 1974 to near the national loan level of $\$ 2$ per bushel.

## CORN SUPPLY AND DISAPPEARANCE




Supply includes small volume of imports. 1977 estimated. 1978 midpoint of projected ranges. 1978 forecast. Year beginning October 1.

## Corn Supply and Disappearance ${ }^{1}$

|  | 1975 | 1976 | $1977^{2}$ | $1978{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million bushels |  |  |  |
| Supply | 6,192 | 6,668 | 7,257 | 7,832 |
| Production | 5,829 | 6,266 | 6,371 | 6,824 |
| Imports ${ }^{\text {f }}$ | 2 | 3 | 2 | 1 |
| Carryover | 361 | 399 | 884 | 1,007 |
| Gov't. ${ }^{4}$ | 0 | 0 | 0 | 0 |
| "Free" ${ }^{\text {s }}$ | 399 | 884 | 1,007 | 1,362 |
| Use | 5,993 | 5,784 | 6,150 | 6,320 |
| Domestic | 4,082 | 4,100 | 4,300 | 4,570 |
| Exports ${ }^{6}$ | 1,711 | 1,684 | 1,950 | 1,900 |

[^29]CORN PRICES


Corn Prices ${ }^{1}$

|  | 1975 | $1976{ }^{2}$ | $1977^{2}$ | $1978{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Dollars/bushel |  |  |  |
| National average | 1.10 | 150 | 2.00 | 2.00 |
| Prices: |  |  |  |  |
| Omaha, \#2 yellow | 2.66 | 2.15 | 2.09 | --- |
| Season average farm price | 2.54 | 2.15 | 2.03 |  |
|  | 2.54 | 2.15 | 2.03 | $2.15$ |

## FEED GRAINS

U.S. feed grain exports set another new record in 1977 due to record outflows of corn and a near record for grain sorghum. The largest single increase was U.S. exports to the Soviet Union as that country attempted to make up for its production shortfalls.

Continued growth in feed demand led to higher imports of U.S. products by Japan, South

Korea, and Taiwan. Larger domestic supplies in the EC led to a sharp decline in U.S. exports to that region.

## U.S. EXPORTS OF FEED GRAINS


U.S. Exports of Feed Grains by Commodity

|  | 1974 | 1975 | 1976 | $1977^{1}$ |
| :--- | ---: | ---: | ---: | ---: |
| Million metric tons |  |  |  |  |
| Total exports | 34.3 | 46.3 | 50.6 | 52.1 |
| Commodities: |  |  |  |  |
| Corn $^{2}$ | 28.4 | 39.6 | 42.4 | 45.1 |
| Barley $^{3}$ | .9 | .5 | 1.5 | 1.2 |
| Grain sorghum $_{\text {Oats }}$ | 4.9 | 6.0 | 6.6 | 5.5 |
|  | .2 | .2 | .1 | .1 |

[^30]Details may not add to total because of independent rounding.
U.S. Exports of Feed Grains by Destination ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Million metric tons |  |  |  |  |
| Total exports | 34.3 | 46.3 | 50.6 | 52.1 |  |
| Receiving country: |  |  |  |  |  |
| Total Europe | 18.5 | 21.1 | 28.0 | 21.5 |  |
| EC-9 | 11.4 | 14.0 | 19.9 | 11.6 |  |
| Total Asia | 9.4 | 11.3 | 14.2 | 16.0 |  |
| $\quad$ Japan | 7.2 | 8.0 | 10.1 | 10.8 |  |
| Western Hemisphere | 4.2 | 3.2 | 2.9 | 3.8 |  |
| Other | 2.2 | 10.7 | 5.5 | 10.8 |  |

[^31]
## FEED GRAINS

World coarse grain production declined in 1977/78, largely due to the short crop in the Soviet Union. Other areas with weather-reduced crops included Brazil and Thailand. For these three countries combined, decline in production exceeded 15 million tons. On the other hand, the United States, Canada, Argentina, South Africa, and East and West Europe harvested
record or near-record crops.
With some shortfalls in production and continued growth in world utilization, feed grain trade set a new record in 1977/78. Smaller imports by the EC were more than offset by larger imports by the Soviet Union, Japan, Mexico, and rapidly developing economies of Asia.


1977 preliminary.

Where World's Coarse Grain Is Grown
$1974 \quad 1975 \quad 1976 \quad 1977^{1}$

Million metric tons

| Total production | 628.0 | 644.4 | 702.1 | 693.9 |
| :--- | :---: | :---: | :---: | :---: |
| By continent: <br> North and Central <br> America | 181.5 | 221.0 | 231.0 | 239.8 |
| Europe (including <br> U.S.S.R.) | 242.0 | 206.7 | 247.5 | 239.4 |
| Asia <br> South America, Africa, <br> and Oceania | 117.5 | 128.3 | 127.0 | 124.2 |
| ${ }^{1}$ Preliminary. | 87.0 | 88.4 | 96.6 | 90.5 |

## WORLD EXPORTS

OF COARSE GRAINS
MIL. METRIC TONS


Includes cornmeal, oatmeal, barley malt and cornstarch. 1977 preliminary.

World Exports of Coarse Grains ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |
| :--- | :---: | :---: | :---: | :---: |
| Million metric tons |  |  |  |  |
| Total exports | 70.5 | 85.1 | 88.5 | 87.6 |
| U.S. | 34.9 | 46.5 | 48.9 | 52.3 |
| Other countries | 35.6 | 38.6 | 39.6 | 35.3 |
| Includes corn and cornmeal for relief and the following |  |  |  |  |
| products: cornmeal, cornstarch, oatmeal, and barley malt. |  |  |  |  |
| 2 Preliminary. |  |  |  |  |

## GRAIN TRANSPORTATION

Since 1970, annual shipments of grain by barge have increased almost 900 million bushels. Some of the increase can be attributed to a shift from railroads, brought about by jumps in rail rates in the 1970's.

Railcar loadings of grain-subject to volatile fluctuations in grain marketing-reached a peak in 1973, chiefly due to a surge in export demand.

Since then, however, grain loadings have trended downward as a result of increased rail rates and strong truck and barge competition. The actual decrease in quantity carried, however, is less than it may seem, for increasingly grain is being loaded into 100 -ton hopper cars, as the older, smaller boxcars are retired.

## CARLOADS OF GRAIN SHIPPED BY RAIL

MIL. CARS


Source: Association of American Railroads, Car Service Division.

## BARGE SHIPMENTS OF GRAIN, INTERIOR RIVER POINTS

MIL. BU.


Source: AMS, Grain Market News.

CHANGE IN RAIL FREIGHT RATES FOR AGRICULTURAL PRODUCTS


Source: Bureau of Labor Statistics.

Rail and Barge Transportation of Grains

|  | 1974 | 1975 | 1976 | 1977 |
| :---: | :---: | :---: | :---: | :---: |
|  | Million bushels |  |  |  |
| Barge shipments of grains ${ }^{1}$ | 1,032 | 1,195 | 1,612 | 1,522 |
|  | Thousands |  |  |  |
| Railcar loadings of grains | 1,465 | 1,338 | 1,323 | 1,250 |
|  | Percent of 1969 |  |  |  |
| Price index for total railroad freight | 149.7 | 169.4 | 186.6 | 199.1 |
| Farm products | 145.3 | 165.0 | 182.7 | 191.3 |
| Food products | 148.9 | 168.5 | 185.1 | 195.3 |

Sources: Barge shipments, Grain Market News, Agricultural Marketing Service; railcar loadings, Association of American Railroads; and railroad freight prices, Bureau of Labor Statistics.

## FATS AND OILS

Production of all fats and oils during 1977 totaled about 27.5 billion pounds, down slightly from 1976 but up from the previous 2 years. Vegetable oils now account for almost twothirds of the total, animal fats for about a third, and tall oil and fish and marine oils for the balance. Soybean oil alone accounts for over one-half of the total.

Following declines in the past 2 years because of unfavorable weather, 1978 peanut production rebounded to a record 4 billion pounds. The dramatic growth in peanut output is owed mainly to improved varieties and better growing practices, since acreage has remained steady at around 1.5 million acres.

FATS AND OILS PRODUCED FROM U.S. AND IMPORTED MATERIALS

BIL. LB.


Production equals the oil equivalent of exported U.S. oilseeds. Tallow and
grease include both edible and inedible oils. Butter based on fat content. Other includes corn, olive, peanut, safflower, coconut, castor, linseed, and tung oils.

Fats and Oils Produced from U.S. and Imported Materials ${ }^{\text {' }}$

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | ---: | ---: | ---: | ---: |
|  | Billion pounds |  |  |  |
| Total fats and oils | 26.8 | 23.6 | 27.8 | 27.4 |
| Soybean | 14.3 | 12.9 | 15.8 | 15.3 |
| Cottonseed | 1.5 | 1.2 | 1.0 | 1.2 |
| Other vegetable oils ${ }^{2}$ | 1.2 | 1.2 | 1.4 | 1.0 |
| Lard $^{\text {Butter }}$ 3 | 1.4 | 1.0 | 1.0 | 1.0 |
| Tallow and grease $^{4}$ | .8 | .8 | .9 | 1.0 |
| Tall oil | 6.2 | 5.3 | 6.3 | 6.6 |
| Fish and marine | 1.2 | 1.0 | 1.2 | 1.2 |
|  | .2 | .2 | .2 | .1 |

${ }^{1}$ From domestic and imported materials. Includes oil equivalent of exported domestic oilseeds. ${ }^{2}$ Includes corn, olive, peanut, safflower, coconut, castor, linseed, and tung oils. ${ }^{3}$ Fat content. ${ }^{4}$ Both edible and inedible kinds.

## PEANUT ACREAGE <br> AND PRODUCTION



Production, farmers' stock basis. Acreage, harvested for nuts.

Peanut Acreage, Production, and Disappearance

|  | 1975 | 1976 | $1977^{1}$ | $1978{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 1,000 acres |  |  |  |
| Acreage: |  |  |  |  |
| Planted | 1,532 | 1,549 | 1,545 | 1,552 |
| Harvested for nuts | 1,504 | 1,522 | 1,516 | 1,516 |
|  | Pounds |  |  |  |
| Total production ${ }^{3}$ | 3,857 | 3,751 | 3,726 | 3,983 |
| Yield per harvested acre | 2,565 | 2,465 | 2,457 | 2,268 |
|  | Million pounds |  |  |  |
| Domestic disappearance: |  |  |  |  |
| For edible purposes | 1,870 | 1,800 | 1,825 | 1,875 |
| Crushings | 1,447 | 1,108 | 434 | 1,000 |

[^32]
## FATS AND OILS

Cottonseed production over the past decade has fluctuated widely, influenced by harvested acreage and yields of cottonseed per acre. Production in 1977 was the largest since 1965. However, 1978 production is down about onefifth, due to reduced harvested acreage and smaller cottonseed yields per acre.

Soybean farm prices are highly volatile,
reflecting growing world demand for soybean meal and oil, changes in soybean supply levels, and competition from other commodities. Prices during the 1977/78 marketing season followed the low at harvest, rising into spring pattern. For the year, prices averaged around $\$ 6$ per bushel, compared with the record $\$ 6.81$ for 1976/77.

## COTTONSEED ACREAGE <br> AND PRODUCTION

MIL. ACRES
15 MIL. TONS
10


Cottonseed Acreage, Supply, and Disappearance ${ }^{\text {' }}$

|  | 1975 | 1976 | 1977 | $1978{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million acres |  |  |  |
| Harvested acreage | 8.8 | 10.9 | 13.3 | 12.3 |
|  | Pounds |  |  |  |
| Yield per acre | 732 | 755 | 832 | 687 |
|  | 1,000 tons |  |  |  |
| Supply | 3,772 | 4,324 | 5,804 | 5,404 |
| Production | 3,218 | 4,122 | 5,521 | 4,590 |
| Stocks of mills, August 1 | 554 | 202 | 283 | 814 |
| Disappearance | 3,570 | 4,041 | 5,259 | 725 |
| Domestic | 3,509 | 3,752 | 4,305 | 4,700 |
| Exports | 61 | 26 | 41 | 25 |

FARM PRICES FOR SOYBEANS
\$ PER BU.


Farm Prices for Soybeans ${ }^{1}$

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | :---: | :---: | :---: | :---: |
|  | Dollars per bushel |  |  |  |
|  | 7.32 | 5.32 | 6.65 | 5.17 |
| September | 8.17 | 4.92 | 5.90 | 5.28 |
| October | 7.44 | 4.45 | 6.11 | 5.61 |
| November | 7.03 | 4.28 | 6.56 | 5,69 |
| December | 6.30 | 4.46 | 6.81 | 5.75 |
| January | 5.72 | 4.50 | 7.06 | 5.53 |
| February | 5.31 | 4.46 | 7.83 | 6.20 |
| March | 5.61 | 4.52 | 9.05 | 6.49 |
| April | 5.00 | 4.87 | 9.24 | 6.77 |
| May | 4.90 | 6.16 | 8.13 | 6.69 |
| June | 5.28 | 6.73 | 6.52 | 6.37 |
| July | 5.80 | 6.07 | 5.48 | 6.21 |
| August |  |  |  |  |
|  |  |  |  |  |
| Season average | 6.64 | 4.92 | 7.11 | 5.98 |
| $\quad$ 'Average prices received by farmers, weighted by monthly |  |  |  |  |

## FATS AND OILS

Acreage harvested for soybeans expanded from 36.5 million acres in 1966 to a record 63.3 million in 1978-an increase of over 70 percent. Higher soybean farm prices and growing world demand for soybeans are encouraging larger plantings. The Corn Belt is still the major producing region, accounting for roughly one-half the total harvested acreage.

Soybean production in 1978 is estimated at about 1.8 billion bushels, or a 60 -percent increase over 1968 . At the same time, total disappearance has closely paralleled output, leaving carryover stocks at very low levels for some years. Total use during 1978/79 is expected to nearly match production, leaving little if any soybeans for additional stock buildup.

## SOYBEAN ACREAGE HARVESTED



Other: Atlantic and Plains States and others Lake: Minnesota, Wisconsin, and Michigan. Delta: Arkansas, Mississippi, and Louisiana Cornbelt: Illinois, Iowa, Indiana, Ohio, and Missouri

Soybean Acreage Harvested ${ }^{1}$

|  | 1975 | 1976 | 1977 | $1978{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million bushels |  |  |  |
| Production | 1,547 | 1,288 | 1,716 | 1,765 |
|  | Bushels |  |  |  |
| Yield per acre | 28.8 | 26.1 | 29.6 | 27.9 |
|  | 1,000 acres |  |  |  |
| U.S. acreage | 53,761 | 49,358 | 57,911 | 63,268 |
| Corn Belt | 26,390 | 24,370 | 28,130 | 30,020 |
| Lake States | 4,451 | 3,737 | 4,722 | 5,020 |
| Plains States | 2,771 | 2,263 | 2,665 | 3,245 |
| Delta States | 9,640 | 9,820 | 10,930 | 11,650 |
| Atlantic States | 3,755 | 3,208 | 3,595 | 4,080 |
| All other States | 6,754 | 5,960 | 7,869 | 9,253 |

${ }^{1}$ Crop year. Acreage harvested for beans. ${ }^{2}$ Preliminary.

SOYBEAN PRODUCTION, USE, AND CARRYOVER


Total use includes crushings, exports, seed, feed, and residual

Soybean Production, Use, and Carryover ${ }^{1}$

|  | 1975 | 1976 | $1977^{2}$ | $1978{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million bushels |  |  |  |
| Supply | 1,736 | 1,533 | 1,819 | 1,890 |
| Production | 1,547 | 1,288 | 1,716 | 1,765 |
| Stocks, September 1 | 188 | 245 | 103 | 125 |
|  | Million bushels |  |  |  |
| Disappearance | 1,491 | 1,430 | 1,694 | 1,760 |
| Domestic | 936 | 866 | 989 | 1,040 |
| Crushings | 865 | 790 | 930 | 965 |
| Seed | 54 | 62 | 59 | 75 |
| Residual ${ }^{4}$ | 17 | 14 |  | 75 |
| Exports | 555 | 564 | 705 | 720 |
| ${ }^{1}$ Year beginning September $1 .{ }^{2}$ Preliminary. ${ }^{3}$ August 1 indi cation. ${ }^{4}$ Includes use for feed, direct use for food, and loss. |  |  |  |  |
| Details may not add to totals because of independent rounding |  |  |  |  |
| Data published currently in Fats and Oils Situation (ESCS) |  |  |  |  |

## FATS AND OILS

U.S. soybean exports reached a record 19.1 million metric tons in crop year 1977/78 (September-August), compared with the previous record 15.4 million set in 1976/77. The largest market was the European Community (EC) which took 8.6 million tons, or 45 percent of total U.S. soybean exports. Next was Japan, with 3.7 million tons, or 19 percent, followed
by Spain, 1.6 million, or 8 percent.
In dollar terms, U.S. exports of soybeans and products are forecast at a record $\$ 6.3$ billion in fiscal 1978 (October-September), up 12 percent from the record established in the previous fiscal year. The gain in dollar volume came despite a lower unit value for soybeans and products than in fiscal 1977.

## U.S. EXPORTS OF SOYBEANS AND PRODUCTS

\$ BIL.
6 -


Fiscal year beginning October 1. 1978, October - June.

## U.S. Exports of Soybeans and Products ${ }^{1}$

|  | 1974/75 | 1975/76 | 1976/77 | 1977/78 |
| :---: | :---: | :---: | :---: | :---: |
|  | Million dollars |  |  |  |
| Total | 4,042.7 | 4,051.9 | 4,929.0 | 5,244.7 |
| Soybeans | 2,988.6 | 3,038.2 | 3,836.3 | 3,976.2 |
| Soybean meal | 666.8 | 806.1 | 766.2 | 872.7 |
| Soybean oil | 387.3 | 207.6 | 326.5 | 395.8 |
| ${ }^{1}$ October-September, except 1976/77, which is OctoberJune. |  |  |  |  |

## WHERE U.S. EXPORTS

 ITS SOYBEANSMIL. METRIC TONS


1977, September 1 - June 30.

Where U.S. Exports Its Soybeans ${ }^{1}$

|  | 1974 | 1975 | $1976{ }^{2}$ | $1977{ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million metric tons |  |  |  |
| Total exports | 11.5 | 15.1 | 14.2 | 17.0 |
| Originating country: |  |  |  |  |
| Europe: |  |  |  |  |
| EC | 5.1 | 7.2 | 6.6 | 7.9 |
| Other | 1.6 | 2.4 | 1.6 | 2.3 |
| Japan | 2.6 | 3.2 | 2.8 | 3.2 |
| Canada ${ }^{\text {a }}$ | . 4 | . 4 | . 4 | . 2 |
| Other | 1.7 | 1.9 | 2.8 | 3.5 |
| June. ${ }^{4}$ Transshipments vja Canada to unidentified countries we not separately reported prior to January 1973. |  |  |  |  |
| Details may not Data published | becau Fats | of ind <br> d Oils | endent <br> ircular | $\begin{aligned} & \text { roundir } \\ & \text { =AS). } \end{aligned}$ |

## FIBERS

Cotton prospects for 1978/79 are highlighted by sharply lower production, strong export demand, and sluggish mill demand. Based on October 1 indications, production will total around 11 million bales, 3 million below the 1977 crop. Cotton use is expected to total near last season's 12 million bales. This season's carryover should be at least one-half million bales
under 1977/78's.
The 22-percent smaller 1978 crop reflects a 1 -million acre decline in area and sharply lower average yield. The prospective yield of 436 pounds per acre is down 84 pounds from 1977. The low yield resulted from late plantings, insect damage, and drought in west Texas.

COTTON PRODUCTION, USE, AND CARRYOVER


Year beginning August 1. 480-pound net weight bales. Ending carryover.

Cotton Production, Use, and Carryover

|  | 1975 | 1976 | $1977^{1}$ | $1978^{2}$ |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | Million bales $^{3}$ |  |  |  |
| Production $^{4}$ | 8.3 | 10.6 | 14.4 | 11.8 |  |
| Consumption $^{5}$ | 7.3 | 6.7 | 6.5 | 6.5 |  |
| Exports $^{3}$ | 3.3 | 4.8 | 5.6 | 5.5 |  |
| Carryover $^{6}$ | 3.7 | 2.9 | 5.5 | 5.4 |  |

${ }^{1}$ Preliminary. ${ }^{2}$ Estimated. ${ }^{3} 480$-pound net weight bales.
${ }^{4}$ Includes preseason ginnings. ${ }^{5}$ Adjusted to a cotton marketingyear basis, August 1 -July 31. ${ }^{6}$ Ending carryover.

Data published currently in Cotton and Wool Situation (ESCS).

COTTON PRODUCTION, ACREAGE AND YIELD


Cotton Production, Acreage, and Yield

|  | 1975 | 1976 | 1977 | $1978{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million bales ${ }^{2}$ |  |  |  |
| Production | 8.3 | 10.6 | 14.4 | 11.8 |
|  | Million acres |  |  |  |
| Harvested acreage | 8.8 | 10.9 | 13.3 | 12.3 |
|  | Pounds |  |  |  |
| Yield | 453 | 465 | 520 | 462 |

[^33]Data published currently in Cotton and Wool Situation (ESCS).

## FIBERS

Cotton prices dropped sharply throughout 1977, reflecting the large crop and increasing stocks. However, prices began to increase in early 1978 due to strong export demand for U.S. cotton, producers' use of the CCC loan program, and deteriorating 1978 production prospects. SLM 1-1/16-inch prices averaged 57 cents a pound in July, up from 51 cents in

January.
Per capita domestic fiber use totaled nearly 59 pounds in 1977, up from 56.2 pounds in 1976. Cotton's share of the market fell to 27.3 percent, a record low. Manmade fibers' share increased to 71 percent.


Mill consumption adjusted for fiber equivalent of trade balance in textile manufactures. All fibers does not include flax and silk. 1977 preliminary.

Per Capita Domestic Consumption of Fibers ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
|  | Pounds |  |  |  |
| Per capita consumption of: |  |  |  |  |
| $\quad$ Cotton | 16.1 | 14.9 | 17.2 | 16.1 |
| Wool | .7 | .7 | 1.0 | 1.0 |
| Manmade | 36.4 | 35.1 | 38.0 | 41.8 |
| Total fibers $^{3}$ | 53.2 | 50.7 | 56.2 | 58.9 |
|  |  |  |  |  |
|  |  | Percent |  |  |

Percentage of total fiber consumption:

| Cotton | 30.3 | 29.3 | 30.7 | 27.3 |
| :--- | ---: | ---: | ---: | ---: |
| Wool | 1.3 | 1.5 | 1.7 | 1.7 |
| Manmade | 68.4 | 69.2 | 67.6 | 71.0 |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Does not include flax and silk. |  |  |  |
|  |  |  |  |  | sumption divided by population.

Data published currently in Cotton and Wool Situation (ESCS).
U.S. COTTON PRICES
¢ PER POUND


Year beginning August 1. Loan rate for SLM 1-1/16" average location.

## FIBERS

World cotton production was on an uptrend through 1974/75, when it peaked at 64.4 million bales. Stocks grew and prices declined, with the result that production dropped 10 million bales in 1975/76. World production has since recovered to 63.5 million bales in 1977/78.

Demand increased steadily through 1973/74. However, since then, consumption has fluc-
tuated in the 61-million-bale range, thanks to slow world economic growth. Also, competition from synthetics-both the raw input and finished product market-has become keener.

WHO GROWS AND USES THE WORLD'S COTTON


Who Grows and Uses the World's Cotton ${ }^{1}$

|  | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | $1976{ }^{2}$ | $1977^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million bales ${ }^{4}$ |  |  |  |  |  |  |  |  |
| Total production | 53.2 | 53.7 | 59.7 | 62.9 | 63.3 | 64.4 | 54.3 | 58.3 | 63.7 |
| By country: |  |  |  |  |  |  |  |  |  |
| United States | 10.0 | 10.2 | 10.5 | 13.7 | 13.0 | 11.5 | 8.3 | 10.6 | 14.4 |
| Foreign noncommunist: |  |  |  |  |  |  |  |  |  |
| Net importing | 5.9 | 5.3 | 6.9 | 6.4 | 6.7 | 7.3 | 6.3 | 6.0 | 6.8 |
| Net exporting | 20.2 | 18.2 | 21.2 | 21.8 | 20.8 | 21.7 | 17.0 | 18.7 | 20.1 |
| Communist | 17.0 | 20.1 | 21.1 | 20.9 | 22.8 | 23.8 | 22.7 | 22.9 | 22.4 |
| Total consumption | 54.9 | 55.8 | 58.4 | 60.2 | 62.2 | 58.6 | 61.8 | 61.7 | 61.0 |
| By country: |  |  |  |  |  |  |  |  |  |
| United States | 8.1 | 8.2 | 8.3 | 7.8 | 7.5 | 5.9 | 7.3 | 6.7 | 6.5 |
| Foreign noncommunist: |  |  |  |  |  |  |  |  |  |
| Net importing | 19.2 | 18.9 | 19.4 | 19.7 | 20.7 | 18.7 | 20.3 | 19.9 | 19.0 |
| Net exporting | 8.0 | 8.4 | 8.6 | 9.7 | 10.2 | 9.8 | 10.6 | 10.9 | 10.7 |
| Communist | 19.6 | 20.4 | 22.2 | 22.9 | 23.9 | 24.2 | 23.7 | 24.3 | 24.8 |
| ${ }^{1}$ Year beginning August 1. ${ }^{2}$ Preliminary. ${ }^{3}$ Estimated. ${ }^{4}$ Bales of .217 metric tons ( 480 pounds) net. |  |  |  |  |  |  |  |  |  |

## FIBERS

World cotton area, increasing steadily during 1966/67-1972/73 with only a slight decline in 1970/71, has since fluctuated widely. It plummeted to a low of 30 million hectares in 1975/ 76 in response to the high beginning stock level of 31 million bales, but rebounded with strong increases in both 1976/77 and 1977/78 as lower levels of world stocks are being held.

World cotton exports have increased steadily in response to changes in production, consumption, and prices. In 1977/78, exports were at a fairly high level- 18.9 million bales-as world cotton prices declined.

## WORLD COTTON EXPORTS

MIL. BALES


Bales of 217727 metric tons net. 1977 preliminary

## World Cotton Exports

1970/71 1975/76 1976/77 1977/78

|  | Million bales $^{1}$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 17.7 | 19.3 | 17.5 | 18.9 |
| Total exports: |  |  |  |  |
| Originating countries: | 3.9 | 3.3 | 4.8 | 5.5 |
| U.S. | 11.3 | 11.7 | 8.2 | 9.2 |
| Foreign noncommunist | 2.6 | 4.3 | 4.5 | 4.2 |
| Communist |  |  |  |  |
| Bales of . 218 metric tons ( 480 lb. ) net. |  |  |  |  |

World Cotton Area ${ }^{1}$

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | ---: | ---: | ---: | ---: |
|  |  | 1,000 hectares |  |  |
| Total area | 33,413 | 29,836 | 30,783 | 32,761 |
| By country: |  |  |  |  |
| United States | 5,089 | 3,560 | 4,417 | 5,374 |
| Foreign noncommunist: |  |  |  |  |
| $\quad$ Net importing | 8,530 | 8,234 | 7,663 | 8,130 |
| $\quad$ Net exporting | 11,963 | 10,176 | 10,763 | 11,396 |
| Communist: |  |  |  |  |
| $\quad$ People's Republic of |  |  |  |  |
| $\quad$ China | 4,856 | 4,856 | 4,897 | 4,800 |
| $\quad$ U.S.S.R. | 2,879 | 2,922 | 2,950 | 2,980 |
| Other | 98 | 88 | 93 | 81 |
| Year beginning August | 1. |  |  |  |
| Ye |  |  |  |  |

${ }^{1}$ Year beginning August 1.

## FIBERS

World cotton prices declined during the first 4 months of the 1977/78 season (August through November), as demand weakened and mills depleted stocks rather than buying at prices above those for manmade fibers. As stocks grew low and consumption regained some strength, mills again began buying large quantities. This, combined with purchases by the People's

Republic of China, also added strength to the market.

Prices trended upward during December 1977 through May 1978. As prices rose at planting time, producers reduced area by only 3.4 percent.

## COTTON PRICES

$\Varangle$ PER LB.


Source: Cotton Outlook Services, LTD. $11 / 16$ inches, C.I.F. Northern Europe

Cotton: C.I.F. Prices, Northern Europe, Monthly Averages

|  | 1976 |  |  |  |  |  | 1977 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July |
| Price per pound for |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SM 1' $1 / 16^{\prime \prime}$ : Cents |  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States (Calif./Ariz.) | 88.57 | 83.82 | 83.28 | 89.38 | 87.56 | 83.98 | 78.69 | 87.62 | 90.20 | 87.62 | 84.00 | 72.60 | 67.38 |
| (Calif./Ariz.) | 88.57 90.80 | 83.82 | 83.28 85.05 | 87.12 | 86.50 | 83.60 | 79.44 | 84.50 | 86.95 | 85.75 | 80.75 | 72.80 | 71.31 |
| Mexico Turkey | 90.80 NQ | 86.88 NQ | 85.35 | 89.19 | 94.62 | 95.60 | 94.88 | 95.00 | 95.00 | 92.50 | 89.00 | 76.25 | 69.25 |
| U.S.S.R. | 90.80 | 88.25 | 84.90 | 86.31 | 86.62 | 84.60 | 79.38 | 82.38 | 85.60 | 84.44 | 81.06 | 71.95 | 67.88 |
|  | 1977 |  |  |  |  |  |  |  |  | 1978 |  |  |  |
|  | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. |
| U.S. (Calif./Ariz.) | 64.06 | 62.40 | 61.62 | 60.00 | 61.75 | 65.94 | 69.12 | 70.75 | 70.56 | 73.81 | 73.25 | 71.50 | 74.35 |
| Mexico | 68.31 | 64.80 | 63.25 | 64.12 | 64.44 | 66.25 | 69.56 | 71.85 | 72.38 | 73.94 | 72.60 | 70.12 | 72.10 |
| Turkey | 63.38 | 60.55 | 61.19 | 60.19 | 61.12 | 64.44 | 67.31 | 70.50 | 71.00 | 71.38 | 71.90 | 71.69 | 73.80 |
| U.S.S.R. | 62.38 | 58.60 | 57.50 | 56.88 | 59.12 | 64.81 | 66.56 | 69.20 | 69.56 | 69.69 | 72.35 | 75.75 | 76.80 |

$N Q=$ not quoted .

## FIBERS

In 1972 and 1973, a supply shortage of wool developed for the first time in 20 years, resulting in soaring wool prices. Following this price boom and the acute shortage of wool and competing fibers during 1973, wool production increased 5 percent. However, the increase came at a time of severely declining demand worldwide. As a result, wool prices slumped, and
unsold wools were stockpiled on an unprecedented scale in main producing countries.

By late 1975, wool prices had increased markedly as demand for natural fibers increased. Prices continued strong through 1978 since annual world production and consumption of wool varied only slightly. Price support levels for wool in major exporting countries also increased.

## WOOL PRICES

¢ PER POUND



Clean basis. Content weight, delivered to U.S. mills. Fine wool: foreign -. Australian 64's type 62, duty-paid; domestic -- graded territory 64 's (20.60-22.04 microns) staple $2-3 / 4^{\prime \prime}$ and up. Medium wool: foreign -- Australian 58/60's, type $423 / 3$ duty-paid; domestic -- graded territory 58 's ( 24.95 - 26.39 microns ) staple $3-1 / 4$ and up, and 60's (23.50-24.94 microns) staple $3^{\prime \prime}$ and up.

WORLD PRODUCTION AND CONSUMPTION OF RAW WOOL


Clean-content weight. Production on marketing-year basis.

World Production and Consumption of Raw Wool ${ }^{1}$

|  | 1970 | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: | :---: |
|  | Million pounds |  |  |  |
| Production ${ }^{2}$ | 3,532 | 3,452 | 3,214 | 3,157 |
| Consumption ${ }^{3}$ | 3,308 | 3,263 | 3,382 | 3,180 |
|  | 1974 | 1975 | 1976 | 1977 |
|  | Million pounds |  |  |  |
| Production ${ }^{2}$ | 3,333 | 3,330 | 3,188 | 3,185 |
| Consumption ${ }^{3}$ | 2,861 | 3,032 | 3,293 | 3,176 |
| ${ }^{1}$ Clean content. ${ }^{2}$ Marketing year. ${ }^{3} \mathrm{Calendar}$ year. |  |  |  |  |

## FIBERS

Domestic per capita use of apparel wool by 1977 had recovered 62 percent from the low of 1974, but was just over half that of a decade earlier.

Wool output was steadily decreasing due to the difficulty of turning a profit at sheep raising, and other related problems. However, the longterm decline may be bottoming out. Ewe lamb
numbers increased during the last 2 years, although total sheep inventory liquidation continued.

Wool imports have varied greatly since 1965, but were greater than domestic production until 1970. By 1977, the wool content in imported textiles was 88 percent greater than domestic production.

## PER CAPITA CONSUMPTION OF APPAREL WOOL



Wool equivalent of excess of imports over exports. 1977 preliminary.

| Per Capita Consumption of Apparel Wool ${ }^{1}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1974 | 1975 | 1976 | $1977^{2}$ |
|  | Pounds |  |  |  |
| Mill consumption: |  |  |  |  |
| Apparel | . 34 | . 44 | . 50 | . 44 |
| Carpet wool | . 09 | . 07 | . 07 | . 06 |
| Total | . 44 | . 51 | . 57 | . 50 |
| Trade balance: |  |  |  |  |
| Apparel wool | . 18 | . 18 | . 33 | . 42 |
| Carpet wool | . 04 | . 05 | . 05 | . 06 |
| Total | . 22 | . 23 | . 38 | . 48 |
| Domestic consumption: ${ }^{3}$ |  |  |  |  |
| Apparel wool | . 53 | . 62 | . 83 | . 86 |
| Carpet wool | . 13 | . 12 | . 12 | . 12 |
| Total | . 66 | . 74 | . 95 | . 98 |
| liminary. ${ }^{3}$ Mill consumption plus wool equivalent of net import of apparel wool textiles. |  |  |  |  |
| Data published cu | otton and | d Wool | Situation | (ESCS |

## U.S. PRODUCTION AND NET IMPORTS OF WOOL AND WOOL PRODUCTS

MIL. LB.


Clean-content weight. Domestic production includes shorn and pulled wool. Net imports are total imports minus exports. 1977 preliminary.
U.S. Production and Net Imports of Wool and Wool Products ${ }^{1}$


## VEGETABLES

Total vegetable use continues to make moderate gains. Use of fresh vegetables has turned upward after declining for many years. In 1977, freeze damage to Florida winter crops reduced total available supplies so that per capita use was not fully maintained. In the canned sector, tomato products have gained in importance the past 10 years.

Potatoes-the most popular vegetable in the United States-are being purchased more and more in processed form. Up to now, processing gains have more than offset the decline in fresh use. Since 1970, processed products have accounted for the larger share of all potatoes consumed.

## VEGETABLE CONSUMPTION PER CAPITA



Canned and frozen on a fresh-weight basis.

Vegetable Consumption Per Capita

|  | 1970 | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: | :---: |
|  | Pounds |  |  |  |
| Total consumption | 213.4 | 212.3 | 216.0 | 224.1 |
| Fresh ${ }^{1}$ | 98.8 | 98.5 | 99.3 | 100.6 |
| Frozen ${ }^{2}$ | 20.6 | 20.2 | 20.4 | 21.9 |
| Canned ${ }^{2}$ | 94.0 | 93.6 | 96.3 | 101.6 |
|  | 1974 | 1975 | 1976 | 1977 |
|  | Pounds |  |  |  |
| Total consumption | 224.6 | 223.8 | 226.2 | 227.3 |
| Fresh ${ }^{1}$ | 102.8 | 102.1 | 102.7 | 101.2 |
| Frozen ${ }^{2}$ | 20.9 | 19.8 | 20.5 | 21.0 |
| Canned ${ }^{2}$ | 100.9 | 101.9 | 103.0 | 105.1 |

${ }^{1}$ Includes dehydrated onions; excludes melons. ${ }^{2}$ Fresh-weight basis.

POTATOES CONSUMPTION PER CAPITA


Potatoes Consumption Per Capita

|  | 1974 | 1975 | 1976 | $1977^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Million cwt. |  |  |  |
| Production | 342.4 | 322.3 | 357.7 | 354.6 |
|  | Pounds |  |  |  |
| Consumption, per capita | 114.3 | 122.1 | 116.4 | 121.7 |
| Fresh | 48.4 | 55.0 | 51.2 | 54.0 |
| Processed ${ }^{2}$ | 65.9 | 67.1 | 65.2 | 67.7 |
| Canned ${ }^{3}$ | 2.3 | 2.0 | 2.0 | 2.5 |
| Frozen | 33.0 | 34.7 | 36.9 | 39.9 |
| Shoestrings and chips | 16.1 | 15.9 | 16.2 | 16.0 |
| Dehydrated | 14.5 | 14.5 | 10.1 | 9.3 |

## VEGETABLES

Production of fresh vegetables has shown a slight rise in recent years, with imports adding to total use. In fact, production this year was up 4.5 million tons from 1970. Processed vegetable tonnage fluctuates from year to year-largely the result of changes in tomato production. However, the long-term trend is definitely upward. Production this year was up over 3 million tons
from 1970.
Production of dry beans has changed little the past three seasons. Prices are influenced most by the size of the crop and export demand. Domestic use tends to vary less than exports.

## PRODUCTION OF FRESH AND PROCESSED VEGETABLES

MIL. TONS


Fresh includes melons. 1978 estimated.

Production of Fresh and Processed Vegetables

|  | 1971 | 1972 | 1973 | 1974 |  |
| :--- | :---: | :--- | :---: | :---: | :---: |
|  | Million tons |  |  |  |  |
| Total | 21.4 | 22.5 | 23.3 | 24.5 |  |
| Fresh $^{1}$ | 11.4 | 11.6 | 11.9 | 12.0 |  |
| Processed $^{10.0}$ | 10.9 | 11.4 | 12.5 |  |  |
|  | 1975 | 1976 | 1977 | $1978^{2}$ |  |
|  |  | Million tons |  |  |  |
|  |  |  |  |  |  |
| Total | 25.9 | 23.9 | 25.7 | 25.1 |  |
| $\quad$ Fresh |  | 11.9 | 12.3 | 12.4 |  |
| $\quad$ Processed | 14.0 | 11.6 | 13.3 | 12.5 |  |

[^34]
## DRY BEAN PRODUCTION AND PRICE

CWT.


1978 estimated.

Dry Bean Production and Price

|  | 1971 | 1972 | 1973 | 1974 |
| :--- | :--- | :--- | :--- | :--- |
| Production: <br> Million cwt. <br> Price: <br> Dollars per cwt. | 15.9 | 18.0 | 16.3 | 20.3 |
|  | 10.90 | 11.00 | 27.30 | 19.80 |
| Production: <br> Million cwt. <br> Price: <br> Dollars per cwt. | 17.4 | 17.8 | 16.3 | 19.4 |

## VEGETABLES

Americans are eating more vegetables in general, but there have been changes in preferences. Much of the recent change in canned vegetable use comes from tomatoes, tomato products, and pickles-thanks to the growth in fast-food outlets. There have also been slight gains in fresh vegetable use, due to increased popularity of salad vegetables. Also, Florida has
effectively extended the marketing season for fresh sweet corn.

Recent changes in frozen vegetable use suggest a trend toward lower calorie items such as broccoli and snap beans, with a drop in lima beans and peas.

CHANGES IN VEGETABLE CONSUMPTION PER CAPITA, 1975-77


Fresh-weight basis; excludes potatoes, sweet potatoes and melons; dehydrated onions included in fresh.

CHANGES IN FROZEN VEGETABLE CONSUMPTION PER CAPITA BETWEEN 1970-72 AND 1975-77


## CHANGES IN FRESH VEGETABLE CONSUMPTION PER CAPITA, 1975-77

TOTAL LB.


Lettuce includes escarole. Onions include about 3 lbs . of dehydrated onions.

## CHANGES IN CANNED VEGETABLE

 CONSUMPTION PER CAPITA BETWEEN 1970-72 AND 1975-77TOTAL LB.


Fresh-weight basis

## VEGETABLES

U.S. vegetable exports increased sharply during 1972-76, after remaining relatively stable since 1966. Exports to Canada, which normally account for well over half of total vegetable exports, were nearly equaled by exports to Europe in 1976 as a result of the European drought. In 1977, U.S. exports declined as European production returned to normal.

Vegetable imports have trended upward since 1966, with most of the fluctuation due to fresh imports. Processed imports have increased steadily since 1970. In 1977, imports jumped sharply as a result of the freeze in Florida. Mexico supplies the bulk of the fresh vegetable imports, while Taiwan is the principal supplier of canned.

## U.S. VEGETABLE EXPORTS BY DESTINATION



Excludes melons, dried beans, and dried peas.

## U.S. IMPORTS OF FRESH

 AND PROCESSED VEGETABLES

Excludes melons, dried beans, and dried peas.
U.S. Vegetable Exports by Destination ${ }^{1}$

|  | 1974 | 1975 | 1976 | 1977 |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Million dollars |  |  |  |  |
| Exports | 276.5 | 305.2 | 498.5 | 466.9 |  |
| Fresh | 132.9 | 158.0 | 247.4 | 213.9 |  |
| Processed | 143.6 | 147.2 | 251.1 | 253.0 |  |
|  |  |  |  |  |  |
| Receiving country: | 154.7 | 175.1 | 201.4 | 219.1 |  |
| $\quad$ Canada | 33.4 | 43.7 | 174.2 | 106.3 |  |
| $\quad$ Europe | 88.4 | 86.4 | 122.9 | 112.8 |  |

${ }^{1}$ Excluding melons, dried beans, and dried peas.
U.S. Imports of Fresh and Processed Vegetables, by Origin ${ }^{1}$

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | ---: | ---: | ---: | ---: |
|  | Million dollars |  |  |  |
| Imports | 283.4 | 277.0 | 336.2 | 470.4 |
| Fresh | 145.6 | 137.0 | 159.0 | 260.0 |
| Processed | 137.8 | 140.0 | 177.2 | 210.4 |
|  |  |  |  |  |
| Originating country: |  |  |  |  |
| $\quad$ Canada | 26.0 | 21.1 | 17.6 | 22.0 |
| Italy | 10.1 | 8.7 | 9.0 | 9.2 |
| Mexico | 118.3 | 115.4 | 136.9 | 252.3 |
| Portugal | 5.8 | 4.1 | 6.1 | 2.7 |
| Spain | 17.8 | 15.0 | 17.7 | 17.6 |
| Taiwan | 33.9 | 37.9 | 55.0 | 84.3 |
| Other | 71.5 | 74.8 | 93.9 | 82.8 |

[^35]
## FRUIT

Citrus fruit production for the 1977/78 season dropped to 14.2 million tons, 8 percent below the previous year. Prices received by growers over the past 25 years have generally varied inversely with production. Reflecting the smaller stocks of frozen concentrated orange juice resulting from the 1977 freeze, however, prices increased relatively more than the
decrease in production.
Citrus consumption per capita has risen by over one-third since 1960. Frozen concentrated orange juice has been responsible for most of the growth, but chilled orange juice consumption has also increased. Consumption of fresh citrus, on the other hand, has dropped substantially since 1960.

## CITRUS FRUIT PRODUCTION AND FARM PRICES



Citrus Fruit Production and Farm Prices ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
|  | 1,000 tons |  |  |  |
| Total production | 14,586 | 14,788 | 15,273 | 14,195 |
|  |  | Percent of 1960 |  |  |
|  | 190.9 | 193.5 | 199.9 | 185.8 |
| Production | 96.8 | 101.3 | 92.2 |  |
| Price |  |  |  |  |

${ }^{1}$ Oranges, Temples, grapefruit, lemons, limes, tangerines, and tangelos. Price weighted by production. ${ }^{2}$ Preliminary as of July 1.

CITRUS CONSUMPTION PER PERSON


Citrus Consumption Per Person ${ }^{1}$


## FRUIT

The 1977 noncitrus fruit crop of 11.8 million tons was 9 percent below the 1976 record, but still well above the early sixties. Because of the smaller crop, prices received by growers rose to record highs, more than double the 1960 figure.

Per capita noncitrus consumption, which has declined since 1960, hit a low of just over 94 pounds in 1974 but rebounded to approxi-
mately 103 pounds in both 1976 and 1977. Increased consumption of fresh noncitrus fruit was responsible; the per capita consumption of canned, frozen, and dried fruit has remained relatively constant.

NONCITRUS FRUIT PRODUCTION AND FARM PRICES


Production of 15 important fruits. Season average growers' price weighted by production. 1977 preliminary.

Noncitrus Fruit Production and Farm Prices ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 1,000 tons |  |  |  |  |
| Total production | 11,502 | 12,143 | 12,926 | 11,830 |  |
|  |  | Percent of 1960 |  |  |  |
|  |  |  |  |  |  |
| Production | 123.2 | 130.2 | 138.6 | 126.8 |  |
| Price | 197.0 | 187.2 | 205.9 | 234.0 |  |

${ }^{1}$ Apples, apricots, avocados, cherries, cranberries, dates, figs, grapes, nectarines, olives, peaches, pears, plums, prunes, and strawberries. Price weighted by production. ${ }^{2}$ Preliminary.

NONCITRUS FRUIT CONSUMPTION PER PERSON


Fresh-equivalent basis. Other includes frozen and dried fruit. Canned includes juice. 1977 preliminary.

## Noncitrus Consumption Per Person ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |
| :--- | ---: | ---: | ---: | ---: |
|  | Pounds |  |  |  |
| Total consumption | 95.1 | 99.4 | 103.1 | 102.8 |
| Fresh | 51.7 | 54.7 | 57.4 | 56.6 |
| Processed | 43.4 | 44.7 | 45.7 | 46.2 |
| $\quad$ Canned | 30.4 | 30.7 | 31.3 | 32.9 |
| $\quad$ Fruit | 20.2 | 20.0 | 20.0 | 21.0 |
| $\quad$ Juice | 10.2 | 10.7 | 11.3 | 11.9 |
| Dried | 9.9 | 10.4 | 11.0 | 10.0 |
| Frozen | 3.1 | 3.6 | 3.4 | 3.3 |
| Fresh-equivalent basis (50 States). ${ }^{2}$ Preliminary. |  |  |  |  |
|  |  |  |  |  |

## FRUIT

U.S. fruit exports have surged ahead at a steady pace since 1971 as a result of the opening of new markets, such as Japan and Hong Kong, as well as gains in Canada and Europe, the principal markets. Major export categories in declining order of importance are: fresh citrus, fresh noncitrus, juices, dried fruit, and canned fruits.

Fruit imports have trended upward since

1966, with a sharp increase in 1977, due mainly to higher valued imports of processed fruit, particularly juice and dried fruit. Major imports are: canned pineapples, olives, juices, dried fruits, and melons. Mexico is the leading supplier, followed by Spain and the Philippines.

## U.S. FRUIT EXPORTS

## BY DESTINATION



Includes melons but excludes re-exported bananas.
U.S. IMPORTS OF FRESH AND PROCESSED FRUIT


Includes melons but excludes bananas.
U.S. Fruit Exports by Destination

|  | 1974 | 1975 | 1976 | 1977 |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  |  | Million dollars |  |  |  |
| Exports | 598.3 | 700.3 | 772.3 | 837.1 |  |
| Fresh | 325.6 | 402.9 | 434.3 | 458.2 |  |
| Processed | 272.7 | 297.4 | 338.0 | 378.9 |  |
| Receiving country: |  |  |  |  |  |
| $\quad$ Canada | 244.0 | 267.7 | 290.8 | 315.4 |  |
| Europe | 165.5 | 201.3 | 214.4 | 229.1 |  |
| Other | 188.8 | 231.3 | 267.1 | 292.6 |  |
| Including melons but excluding re-exported bananas. |  |  |  |  |  |

U.S. Imports of Fresh and Processed Fruit by Origin ${ }^{1}$

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | ---: | ---: | ---: | ---: |
|  | Million dollars |  |  |  |
| Imports | 302.7 | 310.1 | 354.5 | 467.8 |
| $\quad$ Fresh | 70.9 | 75.5 | 90.9 | 108.4 |
| Processed | 231.8 | 234.6 | 263.6 | 359.4 |
|  |  |  |  |  |
| Originating country: | 20.5 | 17.4 | 17.5 | 30.3 |
| $\quad$ Canada |  |  |  |  |
| Japan | 20.2 | 15.1 | 18.3 | 19.7 |
| Mexico | 74.6 | 69.6 | 69.9 | 105.1 |
| Philippines | 22.3 | 37.6 | 47.6 | 58.2 |
| Spain | 64.0 | 59.0 | 71.2 | 70.1 |
| Taiwan | 15.8 | 14.2 | 12.6 | 15.6 |
| Other | 85.3 | 97.2 | 117.4 | 168.8 |
| $\quad$ Including |  |  |  |  |
| melons | but | excluding | bananas | and |
| Products. |  |  |  | banana |

## TROPICAL PRODUCTS

Because of record high prices in 1977, coffee was the second most important commodity in terms of value in world trade, exceeded only by petroleum. Coffee also is by far the leading agricultural commodity imported by the United States, accounting for 32 percent of the total value of all agricultural imports. In 1977, U.S. coffee imports were valued at $\$ 4.3$ billion, up
sharply from $\$ 2.9$ billion in 1976, despite a decline of one-fourth in the import volume.

Leading suppliers to the U.S. market in 1977 were Brazil, Colombia, Mexico, El Salvador, Uganda, Indonesia, and Guatemala, although some 50 countries annually ship coffee to the United States.
U.S. COFFEE IMPORTS AND PRICES


Bags of 60 kilograms. Import price, F.O.B. basis.

WHERE WE GET OUR COFFEE




Includes green, roasted, and soluble
U.S. Coffee Imports and Prices ${ }^{1}$

|  | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million pounds |  |  |  |  |  |  |
| Total imports | 2,920 | 2,833 | 2,994 | 2,639 | 2,769 | 2,727 | 2,065 |
| South America | 1,383 | 1,397 | 1,196 | 965 | 1,184 | 1,031 | 798 |
| Africa | 894 | 810 | 905 | 844 | 754 | 756 | 451 |
| Mexico and Central America | 457 | 378 | 607 | 542 | 573 | 595 | 541 |
| Other | 186 | 248 | 286 | 288 | 258 | 345 | 275 |
|  | U.S. cents/pound |  |  |  |  |  |  |
| Green coffee price ${ }^{2}$ | 40.7 | 43.0 | 54.3 | 59.1 | 58.2 | 100.6 | 197.1 |

## TROPICAL PRODUCTS

World cocoa bean production exceeded consumption during the 1977/78 season as cocoa prices declined from the record level of a year earlier. Preliminary indications for the 1978/79 season, however, point to a close balance between supply and demand and firm prices.

Sugar imports increased sharply during 1977. They were particularly heavy during the last
month of the year, as prices were expected to rise due to increased duties as well as restricted supplies resulting from the International Sugar Agreement. Brazil, the third largest supplier after the Philippines and Dominican Republic, supplied 510,000 tons, compared with none in 1976.

## WORLD PRODUCTION AND

 GRIND OF COCOA BEANS

World Production and Grind of Cocoa Beans ${ }^{1}$
$1971 \quad 1972 \quad 19731974$

|  | Million metric tons |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 1.49 | 1.57 | 1.40 | 1.45 |  |
| Production | 1.44 | 1.56 | 1.56 | 1.48 |  |
| Grind | 1975 | 1976 | 1977 | $1978^{2}$ |  |
|  | Million metric tons |  |  |  |  |
|  | 1.46 | 1.51 | 1.38 | 1.36 |  |
| Production | 1.46 | 1.51 | 1.38 | 1.36 |  |

${ }^{1}$ Year ending September 30 for production. Approximately 90 -day lag before crop reaches importing nations. Grind on calendar-year basis. ${ }^{2}$ Preliminary.

WHERE WE GET THE SUGAR USED IN THE UNITED STATES MIL. METRIC TONS (RAW SUGAR)


Substantial quantities of foreign sugar arrived at the end of 1977 which were recorded in 1978 statistics.

Where We Get the Sugar Used in the United States ${ }^{1}$

|  | 1974 | 1975 | 1976 | $1977^{2}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Total sugar | 10.6 | 8.6 | 10.5 | 10.9 |
|  |  |  |  |  |
| By source: | 2.9 | 2.6 | 3.6 | 3.5 |
| Domestic beet | 2.5 | 2.6 | 2.9 | 2.7 |
| Domestic cane ${ }^{3}$ | 3.4 | 2.0 | 2.3 | 2.7 |
| Western Hemisphere $^{\text {Philippines }}$ | 1.3 | .4 | .8 | 1.0 |
| All others | .6 | 1.0 | .8 | .9 |

[^36]
## TROPICAL PRODUCTS

Trends in U.S. sugarcane and sugarbeet production during 1967-77 reflected changes in harvested acreage and yields. Cane production averaged 25 million short tons, annually, while beet production averaged 26 million. Annual variation in production was greater for sugarbeets, as they are more responsive to changes in expected profits for alternative crops.
U.S. raw sugar prices soared to nearly 30 cents a pound in 1974, reflecting tight world supplies and uncertainty over the U.S. Sugar Act. Since then, prices have declined, with increased capacity throughout the world.

## U.S. SUGARBEET AND SUGARCANE PRODUCTION


U.S. Sugarcane and Sugarbeet Production ${ }^{1}$

|  | 1974 | 1975 | 1976 | 1977 |
| :--- | :--- | :--- | :--- | :--- |
|  | 46.1 | 57.0 | 56.3 | 46.7 |
| Total production | 24.0 | 27.3 | 26.9 | 25.7 |
| Sugarcane | 22.1 | 29.7 | 29.4 | 21.0 |
| Sugarbeet |  |  |  |  |
| Million tons |  |  |  |  |
| Crop year, September/August. |  |  |  |  |

U.S. SUGAR PRICES
¢ PER LB.


## U.S. Sugar Prices

|  | 1970 | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: | :---: |
|  | Cents per pound |  |  |  |
| New York spot, raw | 8.07 | 8.52 | 9.09 | 10.29 |
| Wholesale ${ }^{1}$ | 9.89 | 10.28 | 10.59 | 10.91 |
| Retail ${ }^{2}$ | 12.96 | 13.62 | 13.90 | 15.10 |
|  | 1974 | 1975 | 1976 | 1977 |
|  | Cents per pound |  |  |  |
| New York spot, raw | 29.50 | 22.47 | 13.31 | $10.99^{3}$ |
| Wholesale ${ }^{1}$ | 28.46 | 27.47 | 16.50 | 14.66 |
| Retail ${ }^{2}$ | 32.34 | 37.24 | 23.96 | 21.62 |
| ${ }^{1}$ Bulk, dry beet average. | ${ }^{2}$ Granulated sugar. ${ }^{3}$ Ten-month |  |  |  |

## TOBACCO

Domestic burley use continues below the 1964/65 peak due to rising prices and a decline in use of smoking and plug chewing tobacco. Also, low loan stocks hold back the growth of domestic use for cigarettes. The brisk demand for American-type cigarette blends abroad has about offset the reduced domestic use of recent years. The 1977 crop was slightly below 1976,
reflecting a lower poundage quota. With a larger carryover, the supply for 1978/79 is a little larger than last year. Prospective supply is about three times probable disappearance-slightly above the desired level based on legislative formula.

## BURLEY TOBACCO: SUPPLY, PRICE, USE

 YEAR BEGINNING OCTOBER 1.
Trade stocks include manufacturers' and dealers'. Latest year forecast.

Burley Tobacco: Supply, Price, and Use ${ }^{1}$

|  | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | $1978{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million pounds |  |  |  |  |  |  |  |  |
| Supply | 1,904 | 1,818 | 1,839 | 1,691 | 1,681 | 1,732 | 1,824 | 1,819 | 1,835 |
| Production | 561 | 472 | ${ }^{3} 591$ | ${ }^{3} 461$ | ${ }^{3} 610$ | ${ }^{3} 638$ | ${ }^{3} 664$ | ${ }^{3} 613$ | 620 |
| Trade stocks | 888 | 882 | 921 | 953 | 932 | 1,082 | 1,112 | 1,159 | 1,140 |
| Government loan stocks | 455 | 468 | 327 | 277 | 139 | 12 | 44 | 55 | 75 |
| Use | 557 | 570 | 610 | 619 | 587 | 602 | 617 | 605 | --- |
| Domestic | 503 | 515 | 535 | 532 | 519 | 510 | 500 | 510 | --- |
| Exports | 54 | 55 | 75 | 87 | 68 | 92 | 117 | 95 | --- |
|  | Cents |  |  |  |  |  |  |  |  |
| Price | 72.2 | 80.9 | 79.2 | 92.9 | 113.7 | 105.6 | 114.3 | 120.0 | --- |
| Support level | 68.6 | 71.5 | 74.9 | 78.9 | 85.8 | 96.1 | 109.3 | 117.3 | 124.7 |

## TOBACCO

A reduced crop of flue-cured tobacco has more than offset the increased carryover, so the 1978/79 supply is below last season. Flue-cured tobacco acreage for harvest this year is forecast slightly below 1977, due to the smaller allotment. The yield estimate is 2 percent above last season. Lower acreage and yields are indicated for types 11 and 14; higher acreages and yields
are indicated for types 12 and 13.
This year's supply is 2.7 times last year's use, or about a tenth above the desired ratio based on legislative formula. Carryover next July will again decrease slightly. The relatively high and rising U.S. price tends to restrict both domestic use and exports.

## FLUE-CURED TOBACCO: SUPPLY, PRICE, USE



Trade stocks include manufacturers' and dealers'. Latest year forecast.

Flue-Cured Tobacco: Supply, Price, and Use ${ }^{1}$

|  | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | $1978{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Million pounds |  |  |  |  |  |  |  |  |
| Supply | 3,151 | 3,053 | 2,932 | 2,908 | 2,852 | 3,066 | 3,214 | 3,190 | 3,230 |
| Production | 1,179 | 1,077 | 1,022 | 1,159 | 1,245 | 1,414 | 1,316 | 1,124 | 1,200 |
| Trade stocks | 1,228 | 1,214 | 1,292 | 1,347 | 1,331 | 1,472 | 1,539 | 1,509 | 1,465 |
| Government loan stocks | 744 | 762 | 618 | 402 | 277 | 180 | 359 | 556 | 565 |
| Use | 1,174 | 1,142 | 1,183 | 1,301 | 1,200 | 1,193 | 1,148 | 1,160 | -.. |
| Domestic | 640 | 662 | 664 | 703 | 652 | 671 | 634 | 635 | --- |
| Exports | 534 | 480 | 519 | 598 | 548 | 522 | 514 | 525 | -.. |
|  | Cents |  |  |  |  |  |  |  |  |
| Price | 72.0 | 77.2 | 85.3 | 88.1 | 105.0 | 99.8 | 110.4 | 117.6 | --- |
| Support level | 66.6 | 69.4 | 72.7 | 76.6 | 83.3 | 93.2 | 106.0 | 113.8 | 121.0 |

## TOBACCO

In addition to taxes, tobacco growers, manufacturers, and distributors also shared in the increased spending on tobacco products over the years. But the share received by each segment has shifted. For example, in 1950, U.S. tobacco growers received 16 cents of the consumer's tobacco dollar; in 1976 they received only half as much.
U.S. cigarette manufacturers used an estimated 1.2 billion pounds of tobacco (unstemmed processing weight) in cigarettes in 1977. This was about the same as the year before, although cigarette output increased. Consequently, as more cigarettes are produced from a given volume of tobacco, the tobacco per cigarette has declined.


## INDEX

## How to Order Charts and Slides

Charts in this year's Handbook may be ordered in either black-and-white prints or color slides from USDA's Photography Division, Office of Governmental and Public Affairs, Washington, D.C. 20250. A complete set of 270 slides costs $\$ 35.00$; individual slides are 35 cents each. Black-and-white prints run $\$ 3.30$ for sizes up to $8^{\prime \prime}$ by $10^{\prime \prime}$. Please specify size desired. Be sure to give the chart title and negative number (see Index below) when ordering. Make checks payable to Office of Governmental and Public Affairs, USDA.

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UNITED STATES DEPARTMENT OF AGRICULTURE WASHINGTON, DC

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $\$ 300$

POSTAGE AND FEES PAID
UNITED STATES DEPARTMENT OF AGRICULTURE AGR-101

FOURTH CLASS SPECIAL.HANDLING




[^0]:    Totals may not add due to rounding.

[^1]:    ${ }^{1}$ Includes commodities and services, interest, taxes, and wage

[^2]:    ${ }^{1}$ Tractors and self-propelled machinery. ${ }^{2}$ Preliminary.

[^3]:    ${ }^{1}$ For fiscal years ended June 30. ${ }^{2}$ In 48 States. ${ }^{3}$ As of April

[^4]:    'As of July 1978.

[^5]:    1976 data.

[^6]:    *Includes Alaska and Hawaii.

[^7]:    1975 data. Source: American Medical Association and American Hospital Association.

[^8]:    June 1978 data. Percent of unemployed. Persons 20 years old and over. Source: Bureau of Labor Statistics.

[^9]:    ${ }^{1}$ Urban wage earners and clerical workers, unrevised. ${ }^{2}$ June 1978. ${ }^{3}$ Includes shelter, fuel, utilities, household furnishings, and operation.

[^10]:    1978 preliminary

[^11]:    Based on $1 / 3$ of recommended dietary allowance for 20-year old man; costs for June 1978.

[^12]:    ${ }^{1}$ Preliminary. ${ }^{2}$ Includes supplements to wages and salaries; also includes imputed earnings of proprietors, partners, and family workers. ${ }^{3}$ Includes charges tor heating and refrigeration; does not include local hauling. ${ }^{4}$ Includes property, social security, unemployment insurance, State income, franchise taxes, license fees, and other fees but does not include Federal income tax. ${ }^{5}$ Includes costs such as food service in institutions, utilities, fuel, local for-hire transportation, and water transportation.

[^13]:    ${ }^{1}$ Includes transportation of wheat and flour, flour milling, processing and merchandising of farm ingredients other than wheat, and nonfarm ingredients.

[^14]:    Corn sirup includes HFCS in 1977

[^15]:    Source: Bureau of Labor Statistics

[^16]:    1978 preliminary. Other program costs include State matching fund, printing, production, and employment registration.

[^17]:    ${ }^{1}$ Average per person. Fiscal year data. ${ }^{2}$ Consumer Price Index (CPI) based on July-June average. ${ }^{3}$ Preliminary.

[^18]:    1978 preliminary.

[^19]:    1978 preliminary

[^20]:    ${ }^{1}$ Averages for 1930-39 are: Cattle and calves on farms, January 1, 66.9 million head; beef and veal production, 7,695 million pounds; and U.S. population, 126.9 million. ${ }^{2}$ Forecast. ${ }^{3}$ Civilian population, July 1.

[^21]:    Economics, Statistics, and Cooperatives Service composite price

[^22]:    ${ }^{1}$ Based on resident population except fluid milk products, which are based on estimated population using fluid products from purchased sources. ${ }^{2}$ Includes skim milk, buttermilk, and flavored milk drinks. ${ }^{3}$ Includes milk and cream mixtures.
    ${ }^{4}$ Includes full-skim American.

[^23]:    Data published currently in Dairy Situation (ESCS).

[^24]:    ${ }^{1}$ Simple average. ${ }^{2}$ Preliminary. ${ }^{3}$ Forecast. ${ }^{4}$ Total egg production divided by average number of layers on hand.

    Data published currently in Poultry and Egg Situation (ESCS).

[^25]:    ${ }^{1}$ Crop years beginning: Wheat, June 1; flue-cured tobacco, July 1; cotton and rice, August 1; soybeans, September 1; corn and other tobacco, October 1. ${ }^{2}$ Forecast.

[^26]:    ${ }^{1}$ Year beginning October 1 for corn and sorghum; June 1 for oats, barley, wheat, and rye; and August 1 for rice. ${ }^{2}$ Projected.

    Totals may not add due to independent rounding.

[^27]:    ${ }^{1}$ Year beginning June 1. ${ }^{2}$ Preliminary. ${ }^{3}$ Domestic certificate payments prior to 1974/75; beginning in 1974/75, guaranteed payments under target price program when applicable.

[^28]:    ${ }^{1}$ Year beginning October 1. ${ }^{2}$ Preliminary. ${ }^{3}$ Based on August indications. ${ }^{4}$ Oilseed meals, animal protein feeds and mill byproducts.

[^29]:    ${ }^{1}$ Year beginning October 1. ${ }^{2}$ Preliminary. ${ }^{3}$ Based on August indications. ${ }^{4}$ Uncommitted inventory. ${ }^{5}$ Privately owned stocks; residual. Includes total government loans (original and reseal).
    ${ }^{6}$ Includes grain equivalent of products.

[^30]:    ${ }^{1}$ Preliminary. ${ }^{2}$ Includes corn and cornmeal for relief, cornmeal, hominy and grits, and cornstarch. ${ }^{3}$ Includes barley malt.
    ${ }^{4}$ Includes oatmeal.

[^31]:    ${ }^{1}$ Includes corn and cornmeal for relief and the following products: cornmeal, hominy and grits, cornstarch, oatmeal, and barley meal. ${ }^{2}$ Preliminary.

    Details may not add to totals because of independent rounding.

[^32]:    Data published currently in the Fats and Oils Situation (ESCS).

[^33]:    ${ }^{1}$ Preliminary. ${ }^{2} 480$-pound net weight bales.

[^34]:    ${ }^{1}$ Includes melons. The processing portion of broccoli, carrots, and cauliflower are included with the processing crops beginning in 1972. ${ }^{2}$ Estimated.

[^35]:    ${ }^{1}$ Excluding melons, dried beans, and dried peas.

[^36]:    ${ }^{1}$ By raw value of sugar. Centrifugal sugar production for domestic beet and domestic cane and imports from foreign suppliers. ${ }^{2}$ Preliminary. ${ }^{3}$ Includes mainland cane, Hawaii, Puerto Rico, and Virgin Islands.

    Details may not add to total because of independent rounding.

