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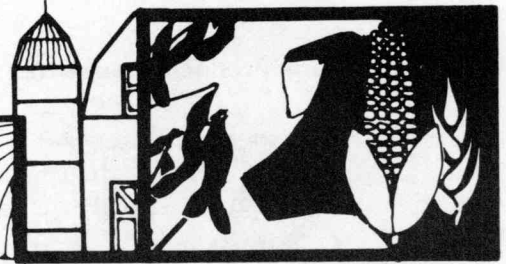
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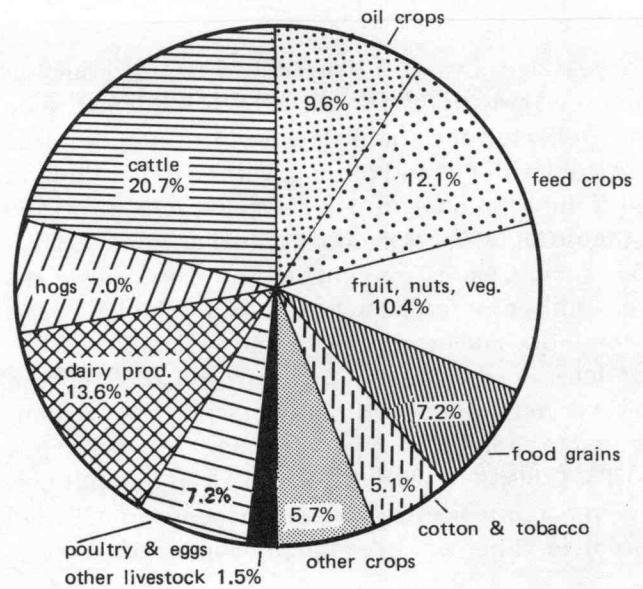
**LETTER**

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**FARM INCOME ESTIMATES** for 1983, recently completed by the USDA, indicate a substantial rise in net cash income. The rise in 1983 income is attributable to sharply higher government payments and a decline in expenses that offset a drop of more than 4 percent in cash receipts. In contrast, the initial forecast for 1984 indicates a drop in net cash income, with a rise in cash receipts being more than offset by higher production expenses.

The income forecasts foreshadow a substantial increase in farm sector receipts in 1984. Livestock receipts are expected to total well above the \$69.2 billion level of last year as higher livestock prices offset declines in marketings. The drop in 1983 livestock receipts is attribut-

**Cash receipts from farm marketings, 1983**  
 (\$138.7 billion)



**Farm income statistics**

	1981	1982	1983	1984*
(----- billion dollars -----)				
<b>Earnings</b>				
Crop receipts <sup>1</sup>	73.3	74.6	69.5	70-74
Livestock receipts	69.2	70.1	69.2	72-76
Total receipts	142.6	144.8	138.7	144-148
Cash government payments	1.9	3.5	4.1	2-5
Value of PIK commodities	0.0	0.0	5.2	4-6
Other cash income	1.9	2.0	1.5	1-3
Gross cash income	146.4	150.2	149.6	154-158
Nonmoney income <sup>2</sup>	13.6	14.2	13.6	12-14
Realized gross income	160.0	164.4	163.2	167-171
Value of inventory change	7.9	-2.6	-11.7	7-11
Total gross income	167.9	161.8	151.4	176-180
<b>Earnings</b>				
Cash expenses	111.4	113.4	109.5	118-122
Other expenses <sup>3</sup>	25.5	26.1	25.8	24-28
Total expenses	136.9	139.5	135.3	144-148
<b>Income measures</b>				
Net cash income <sup>4</sup>	35.0	36.8	40.1	34-38
Total net farm income <sup>5</sup>	31.0	22.3	16.1	30-34

able to large declines in cattle and hog receipts that more than offset gains in poultry. Dairy receipts rose 3 percent for the year, but when adjusted to reflect the deductions in effect during 1983, net dairy receipts registered a slight decline. The current USDA forecast of livestock receipts for this year ranges from \$72 billion to \$76 billion.

Crop receipts, including net CCC loans, are expected to total between \$70 billion and \$74 billion in 1984, up from last year's \$69.5 billion level. However, the cash receipts of crop producers will be supplemented by direct government payments of between \$6 billion and \$10 billion. Gross cash income in the farm sector, therefore, is expected to range from \$154 billion to \$158 billion this year, well above the \$149.6 billion recorded in 1983.

The large revenue gains, however, will be more than offset by production costs well above the low level

\*USDA forecast ranges.

<sup>1</sup>Crop receipts include net loans made by the CCC to farmers.

<sup>2</sup>Value of home consumption of farm products and the imputed rental value of dwellings.

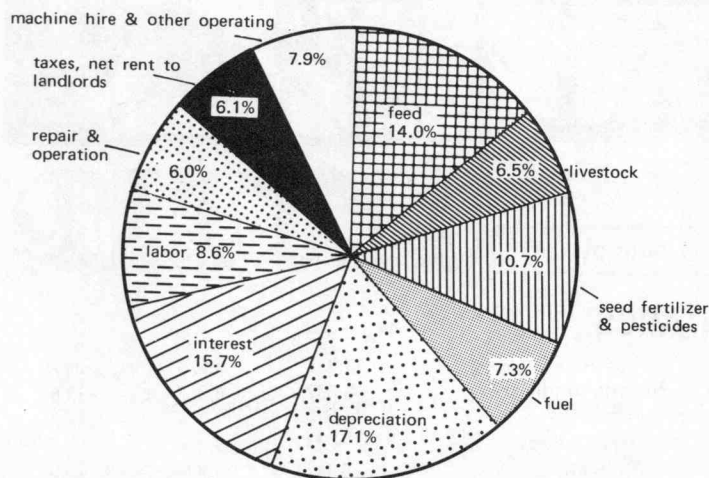
<sup>3</sup>Includes depreciation of farm capital and perquisites to hired labor.

<sup>4</sup>Gross cash income less cash expenses.

<sup>5</sup>Total gross income less total expenses.

SOURCE: USDA

### Farm production expenses, 1983 (\$135 billion)



of a year ago. Last year's decline in farm production expenses—only the third year-to-year reduction since 1940—reflected the sharp decline in planted acreage associated with PIK and other government programs as well as the additional drop in harvested acreage caused by the drought. Total production expenses in 1983, at \$135.3 billion, were 3 percent below the previous year's level. Outlays for fertilizer, fuel, seed, machine hire and custom work, and net rent registered the largest year-to-year declines of all inputs, ranging from 8 to 24 percent. However, high prices and a slight increase in use contributed to a marked 12.5 percent increase in feed costs in 1983. Consistent with the overall drop in input use, however, nonreal estate interest expense in 1983 fell more than 11 percent from the previous year's level.

Total production expenses in 1984 are expected to rebound sharply from a year ago. Both higher prices for agricultural inputs and larger purchases associated with the increased plantings will contribute to the rise. In addition, a sharp rise in operating credit will likely contribute to higher interest expense this year. Current USDA forecasts of total production expenses in 1984 range from \$144 billion to \$148 billion.

Net cash income, which measures the income farmers receive in a given year as the difference between gross cash income and cash expenses, is projected to be down from last year's record level. This measure of income represents the amount available to farmers to purchase assets, retire loans, and cover any other expen-

ditures including those of the farm household. Although cash income is expected to be up this year, cash expenses are forecast to rise even more. As a result, net cash income in 1984 is expected to fall in the \$34 billion to \$38 billion range, down from the \$40.1 billion realized in 1983. When adjusted to reflect changes in purchasing power over time, the forecast range indicates a continuation of the downward trend in real net cash income that the farm sector has experienced since the late 1970s.

In contrast to the projected decline in net cash income, a sharp jump in total net farm income is forecast for 1984. Total net farm income, which measures the income generated by a given year's production whether it is sold, fed or placed in inventory, includes nonmoney income—the value of home consumption of farm products and the imputed rental value of farm dwellings—and the value of the change in inventories on the revenue side, while counting depreciation and benefits to hired labor as expenses. The current forecast of this income measure for 1984 ranges from \$30 billion to \$34 billion, virtually double the year-ago level of \$16.1 billion.

The large swings evident in net farm income over the last few years are attributable to the value of the change in farm inventories. The PIK and drought-reduced 1983 crop contributed to a record large draw-down of inventories, totaling \$11.7 billion. This large deduction from income resulted in the unusually small \$16.1 billion total net farm income measure recorded in 1983. In contrast, the sharp rebound in planted acreage and anticipated large crops this year suggest that a substantial rebuilding of stocks is likely to occur. The latest USDA forecast of the value of this increase in inventories ranges from \$7 billion to \$11 billion, resulting in the estimate of sharply higher total net farm income in 1984.

While the cash income of the farm sector has been depressed during the 1980s, income from nonfarm sources has grown in importance. Off-farm earnings of farmers, which are particularly important to small farmers, exceeded income from farm sources in 1983 for the third consecutive year. At \$41 billion, off-farm income was up 4 percent from the previous year's level. With net cash income expected to decline this year and off-farm income projected to rise, it appears that non-farm earnings will exceed farm income again in 1984.

**FARM EQUIPMENT SALES** through the first six months of the year continued to lag the sluggish year-ago pace. Even the relatively strong gain in unit sales of

farm tractors registered in the first quarter has been largely offset by lagging sales since then. In light of the disappointing sales trends and continued financial diffi-

culties among many farmers, earlier estimates of U.S. farm machinery expenditures for all of 1984 have been scaled back from earlier expectations.

The extent of the drop in sales during the first half varies considerably across the different types of major equipment items. Unit sales of combination grinder-mixers during the first six months of 1984, down 45 percent, registered the sharpest decline from year-ago levels. Windrower and corn head sales were down more than 22 percent through June, while sales of self-propelled combines and forage harvesters lagged the year-ago pace by about 25 percent. Sales of small balers (bales under 200 pounds) and mower conditioners, both off about 14 percent from last year, showed the smallest drop.

Sales, through June, of tractors with 40 or more horsepower remained about 1 percent above the level of a year ago, but sharp year-to-year declines of 12 and 15 percent during May and June, respectively, partially offset the gains registered in the first four months of the year. Despite the overall sluggish pace of tractor sales, large tractors continue to show strong gains. Through mid-year, sales of two-wheel drive tractors with 140 horsepower or more were 24 percent above the level of a year ago, while four-wheel drive units with 200 or more horsepower outstripped the previous year's pace by more than 21 percent.

**Farm equipment sales in District states** at mid-year were somewhat weaker than the overall U.S. sales figures. Sales of farm tractors, including units with less than 40 horsepower, were down more than 9 percent through June, while sales of self-propelled combines were off the year-ago pace by 39 percent. District sales of small balers and windrowers during the first two quarters of 1984 were down about 14 percent from the year-ago level, while forage harvester sales lagged last year's pace by 20 percent. Sales of corn heads and grinder-mixers were down 29 and 49 percent, respectively, from the mid-year level of 1983. District sales of mower conditioners registered a relatively small year-to-year decline of about 3 percent.

Inventories of most farm equipment items, although below June 1983 levels, remain near or well in excess of the sales of the previous twelve months. Inventories of tractors with 40 or more horsepower were, at the end of

### First half unit sales of farm equipment in the U.S.

	January-June		Percent change 1983-1984
	1983	1984	
Tractors, 40 plus horsepower			
Two-wheel drive			
40-99 HP	20,580	21,563	4.8
100-139 HP	8,057	5,579	-30.8
140 HP or more	6,103	7,566	24.0
Four-wheel drive	2,248	2,521	12.1
Total	36,988	37,229	.7
Self-propelled combines	4,575	3,403	-25.6
Balers (bales under 200#)	4,522	3,865	-14.6
Forage harvesters	1,428	1,075	-24.7
Mower conditioners	8,032	6,937	-13.6
Windrowers	1,288	1,002	-22.2
Grinder-mixers	2,643	1,448	-45.2
Corn heads	2,341	1,806	-22.9

SOURCE: USDA

June, down 2 percent from a year ago, led by a 25 percent year-to-year drop in inventories of four-wheel drive units. However, June inventories of all tractors with 40 or more horsepower still equal more than 91 percent of the sales made during the previous twelve months. Combine inventories in June, although down more than 5 percent from a year ago, represented 130 percent of the sales during the preceding 12 month period. June inventories of most other farm equipment items covered in the FIEI report remained well above the level of sales for the previous 12 months. Windrower inventories were an exception to this trend. Although registering a 9 percent year-to-year drop, they equalled only 37 percent of the previous twelve months' sales.

The sluggish pace of sales through the first six months of the year has led to a downward revision of about 6 percent in the USDA estimate of farm machinery expenditures in all of 1984. However, the current estimate, at \$8.1 billion, represents a 2.5 percent increase over 1983 expenditures. The expected rise in expenditures is due largely to high prices paid for farm machinery, which have risen faster than prices of other production items, offsetting declining unit sales. However, continued financial pressure on many farmers with already high debt servicing costs may further dampen demand, resulting in additional downward revisions in 1984 machinery expenditures.

Peter J. Heffernan



## Selected Agricultural Economic Indicators

	Latest period	Value	Percent change from		
			Prior period	Year ago	Two years ago
<b>Prices received by farmers (1977=100)</b>	July	143	- 0.7	+ 9	+ 5
Crops (1977=100)	July	140	+ 3.7	+13	+12
Corn (\$ per bu.)	July	3.32	- 1.5	+ 6	+33
Oats (\$ per bu.)	July	1.77	- 1.7	+21	+13
Soybeans (\$ per bu.)	July	6.81	-14.8	+ 9	+14
Wheat (\$ per bu.)	July	3.29	- 4.6	- 1	+ 1
Livestock and products (1977=100)	July	145	+ 1.4	+ 5	- 1
Barrows and gilts (\$ per cwt.)	July	53.60	+ 7.0	+18	- 9
Steers and heifers (\$ per cwt.)	July	62.50	+ 1.6	+ 4	- 1
Milk (\$ per cwt.)	July	12.90	+ 0.8	- 2	- 2
Eggs (¢ per doz.)	July	59.9	- 1.8	+ 4	+ 9
<b>Prices paid by farmers (1977=100)</b>	July	166	0	+ 4	+ 5
Production items	July	156	- 0.6	+ 3	+ 3
Feed	July	137	- 2.8	+ 4	+11
Feeder livestock	July	154	+ 2.7	0	- 8
Fuels and energy	July	201	- 1.0	- 2	- 6
<b>Producer prices (1967=100)</b>	July	293	+ 0.5	+ 2	+ 4
Agricultural machinery and equipment	July	337	+ 0.1	+ 3	+ 9
Fertilizer materials	July	238	- 0.6	+ 7	- 1
Agricultural chemicals	July	310	- 0.3	+ 6	-33
<b>Consumer prices (1967=100)</b>	July	312	+ 0.3	+ 4	+ 7
Food	July	303	+ 0.4	+ 4	+ 5
<b>Production or stocks</b>					
Corn stocks (mil. bu.)	June 1	2,137	N.A.	-57	-45
Soybean stocks (mil. bu.)	June 1	456	N.A.	-42	-29
Beef production (bil. lbs.)	July	1.93	- 2.5	+ 7	N.A.
Pork production (bil. lbs.)	July	1.04	-10.0	- 8	N.A.
Milk production (bil. lbs.)	July	11.6	- 2.2	- 4	N.A.

N.A. Not applicable

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