

FARM AND RANCH BULLETIN

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COSTS AND ECONOMIES OF SIZE IN TEXAS-OKLAHOMA FEEDLOTS

Large commercial cattle feeding operations — those with one-time capacities of 10,000 head or more — had a distinct cost advantage over smaller feedlots in Texas and Oklahoma in 1966-67. According to Raymond A. Dietrich of Texas A&M University, total feeding costs were affected not only by feedlot size but also by rates of feedlot utilization, which also varied with the size of the operation. Total feeding costs for lots with 1,000-head capacities, for example, were 2.6 cents per pound of gain higher than those for lots with 35,000-head capacities. This difference resulted in feedlots with capacities of 10,000 head or more accounting for about 55 percent of the fed cattle marketed in these states during the study period. And Dr. Dietrich found indications that large lots will account for even greater proportions in the future.

Investments in fixed facilities varied with the size of the feedlot and the feeding area. Total capital investments in equipment and facilities averaged about \$35 per head of capacity. The two largest items of capital investments were pens, with their associated equipment, and milling equipment. Together, these items accounted for more than half of total fixed investments. Other fixed facilities were storage facilities, water systems, feed distribution equipment, transportation equipment, and land.

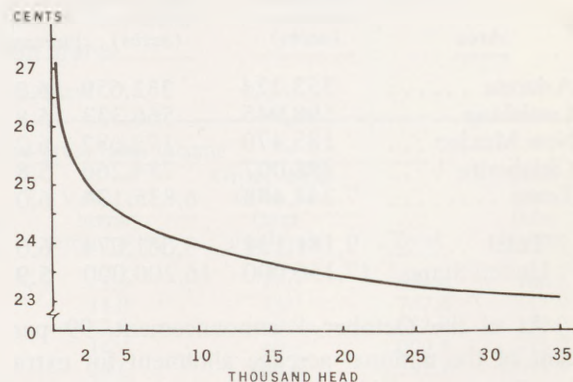
Operating costs — those varying with output and consisting mainly of feed, interest on feeder cattle, labor, death loss, and veterinary expenses — made up 95 percent of total feeding costs. Annual fixed costs — depreciation, interest, taxes, insurance,

repairs, and fixed labor — accounted for the remaining 5 percent. Feed was by far the most important variable cost item, accounting for more than 80 percent of total operating costs.

Feedlots with capacities of less than 5,000 head were generally at a relative disadvantage regarding annual fixed costs per pound of gain. Feedlots with one-time feeding capacities of 1,000 head, for example, had total annual fixed costs of about 2.4 cents per pound of gain, compared with 1.4 cents for feedlots with 10,000-head capacities.

One major factor contributing to the lower fixed costs per pound of gain in larger feedlots was their high level of feedlot utilization. Feedlots with capacities of at least 10,000 head usually had utilization rates of more than 75 percent. By contrast, feedlots with capacities of less than 1,000 head had utilization rates of no more than 50 percent.

TOTAL FEEDING COST PER POUND
OF GAIN, BY SIZE OF FEEDLOT



SOURCE: Texas A&M University.

Because of the impact on fixed costs, Dr. Dietrich expects greater emphasis to be placed on high feedlot utilization as feedlots become larger.

Dr. Dietrich, considering grain sorghum production and assumptions regarding feed use, estimated that grain sorghum available for feeding in Texas in 1966-67 was sufficient for finishing approximately 5 million head of cattle, or about three times the number marketed. He also concluded that differentials in feeding costs between areas and the availability of nearby feed supplies suggest further heavy concentration of cattle feeding in the Texas and Oklahoma panhandle areas.

Cotton Acreage Allotments Announced for 1970

Cotton growers will vote on the 1970 marketing quota in a referendum to be conducted by mail between December 1 and 5. The U.S. Department of Agriculture has set a revised upland cotton marketing quota of 16,008,333 five-hundred pound bales and a national acreage allotment of 17 million acres. This represents an increase of 941,666 bales in the quota and an increase of 1 million acres in the allotment from those announced on October 1. In addition, the USDA has announced a national acreage reserve of 150,000 acres for establishment of minimum farm allotments.

The national acreage allotment and the national reserve are apportioned to states according to provisions of law. The following are comparisons between the 1969 and 1970 allotments in the states of the Eleventh Federal Reserve District.

| Area | 1970 state allotment (acres) | 1969 state allotment (acres) | Percent increase |
|----------------------|------------------------------|------------------------------|------------------|
| Arizona | 353,224 | 332,659 | 6.2 |
| Louisiana | 598,945 | 566,333 | 5.8 |
| New Mexico | 183,470 | 172,682 | 6.2 |
| Oklahoma | 798,007 | 754,266 | 5.8 |
| Texas | 7,247,488 | 6,835,134 | 6.0 |
| Total | 9,181,134 | 8,661,074 | 6.0 |
| United States | 17,150,000 | 16,200,000 | 5.9 |

As of the October 1 announcement, 99 percent of the national acreage allotment for extra-long staple cotton has been apportioned to three states of the Eleventh District — Texas, New Mexico, and Arizona. The national extra-long

staple cotton marketing quota was set at 82,481 bales, and the national acreage allotment, at 78,398 acres. Because of increasing yields, the allotment is 1,262 acres less than for 1969. The quotas and allotments apply to American-Egyptian, Sea Island, and Sealand cotton.

Twenty-seven counties in the states of the Eleventh District were designated as suitable for production of extra-long staple cotton. The following are extra-long staple cotton allotments apportioned to states of the District.

| Area | 1970 state allotment (acres) |
|----------------------|------------------------------|
| Arizona | 34,037 |
| New Mexico | 15,914 |
| Texas | 27,666 |
| Total | 77,617 |

Growers will be notified of their individual allotments before the referendum. If marketing quotas are not in effect for the 1970 cotton crop, the allotment program will still remain in effect, but there will be no price-support payments.

Farm Output

The American farmer now produces over 20 percent more products on 6 percent fewer acres than in 1957-59.

— Output per man-hour on the farm increased 82 percent between 1957-59 and 1968.

— One U.S. farm worker supplied the food and fiber for 43 people in 1968, compared with 23 people in 1957-59.

Beef Facts

Production of beef has more than doubled since 1946. To keep shoppers supplied, 21 billion pounds were produced last year. Of that amount, fed beef accounted for 15 billion pounds — four times the quantity produced in 1946. Top grades of fed beef increased from a fourth of total production in 1946 to more than half in 1968.

Although use of lower grade beef for hamburger, canned meats, and other products has increased, production of lower grades has not. Annual output of the lower grades has been about 5 billion pounds for the past two decades.

District States Farm Income in 1968

Farmers and ranchers in the five states of the Eleventh Federal Reserve District realized slightly more than \$6 billion in gross income last year. Of that amount, cash receipts from farm marketings accounted for about 83 percent, and Government payments accounted for 12 percent. The remaining 5 percent was home consumption of farm products and gross rental value of farm dwellings.

Production expenses in these states totaled nearly \$4.3 billion. Current operating expenses made up about 74 percent of that, and depreciation and other consumption of farm capital, 15 percent. Taxes, interest, and rent made up the remaining 11 percent.

Total net farm income, which includes adjustments for net change in the value of farm inventories, was almost \$2 billion — about 16 percent more than in 1967. The increases were in Arizona, Louisiana, New Mexico, and Texas. Oklahoma showed a decrease in net income.

Distribution of cash receipts shows New Mexico and Oklahoma with relatively large marketings of livestock and livestock products and Texas with slightly larger receipts from livestock than from crops. Cash receipts in Arizona were about equal from crops and livestock, while receipts in Louisiana reflected greater marketings of crops than of livestock.

Farm Production Expenses, 1968

Five Southwestern States

(In millions of dollars)

| Area | Total current farm operating expenses | Depreciation and other consumption of farm capital | Taxes on farm property | Interest on farm mortgage debt | Net rent to nonfarm landlords | Total production expenses |
|------------------|---------------------------------------|--|------------------------|--------------------------------|-------------------------------|---------------------------|
| Arizona | 413.0 | 27.5 | 12.1 | 16.5 | 23.3 | 492.4 |
| Louisiana | 305.8 | 88.5 | 9.6 | 26.0 | 15.9 | 445.7 |
| New Mexico | 198.1 | 31.9 | 6.3 | 15.8 | 3.8 | 256.0 |
| Oklahoma | 533.8 | 151.1 | 34.2 | 33.4 | 15.4 | 767.9 |
| Texas | 1,703.2 | 347.8 | 107.7 | 108.8 | 55.2 | 2,322.7 |
| Total | 3,153.9 | 646.8 | 169.9 | 200.5 | 113.6 | 4,284.7 |

NOTE. — Details may not add to totals because of rounding.
SOURCE: U.S. Department of Agriculture.

Farm Income, 1968

Five Southwestern States

(In millions of dollars)

| Area | Realized gross farm income | | | | | Total net farm income |
|------------------|------------------------------------|---------------------|---------------------------|--------------------------------------|---------|-----------------------|
| | Cash receipts from farm marketings | Government payments | Value of home consumption | Gross rental value of farm dwellings | Total | |
| Arizona | 587.2 | 44.7 | 5.3 | 17.3 | 654.4 | 180.6 |
| Louisiana | 628.7 | 50.7 | 14.0 | 54.0 | 747.4 | 315.0 |
| New Mexico | 322.4 | 36.0 | 3.9 | 10.5 | 372.8 | 121.0 |
| Oklahoma | 846.0 | 108.4 | 14.4 | 40.6 | 1,009.5 | 273.0 |
| Texas | 2,669.0 | 465.4 | 28.6 | 129.4 | 3,292.4 | 1,091.9 |
| Total | 5,053.3 | 705.2 | 66.2 | 251.8 | 6,076.5 | 1,981.5 |

NOTE. — Details may not add to totals because of rounding.
SOURCE: U.S. Department of Agriculture.

Distribution of Cash Receipts From Farm Marketings, by Commodities, 1968

Five Southwestern States

(Percent of state total)

| Commodity | Arizona | Louisiana | New Mexico | Oklahoma | Texas |
|----------------------------------|---------|-----------|------------|----------|-------|
| All commodities | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Livestock and products | 48.6 | 36.5 | 68.5 | 68.3 | 53.0 |
| Cattle and calves | 39.8 | 17.3 | 56.1 | 53.8 | 33.7 |
| Sheep and lambs | .6 | .1 | 1.9 | .2 | 1.3 |
| Hogs | .6 | 1.2 | .9 | 3.1 | 2.0 |
| Dairy products | 6.0 | 10.3 | 6.3 | 7.9 | 6.9 |
| Poultry and eggs | 1.1 | 7.5 | 1.7 | 2.8 | 7.6 |
| Other livestock | .4 | .2 | 1.5 | .4 | 1.5 |
| Crops | 51.4 | 63.5 | 31.5 | 31.7 | 47.0 |
| Wheat | .6 | .3 | 2.6 | 16.9 | 3.7 |
| Rice | — | 20.1 | — | — | 5.2 |
| Hay | 3.3 | .4 | 5.1 | 1.9 | .9 |
| Sorghum grain | 3.1 | .1 | 4.0 | 1.7 | 11.4 |
| Barley | 2.0 | — | .2 | .5 | (1) |
| Oats | (1) | (1) | (1) | .1 | .2 |
| Corn | .1 | .4 | .1 | .1 | .6 |
| Cotton | 16.7 | 10.6 | 8.6 | 3.2 | 14.0 |
| Oil crops | — | 13.9 | .9 | 4.4 | 2.9 |
| Vegetables | 14.3 | 3.7 | 6.2 | .6 | 4.9 |
| Fruits and nuts | 7.7 | 1.3 | 2.1 | .3 | 1.2 |
| Other crops | 3.4 | 12.7 | 1.6 | 1.9 | 1.8 |

¹ Less than 0.05 percent. Percentages may not be accurate to 0.1 because of method of machine computation.
SOURCE: U.S. Department of Agriculture.

Corporate Farms Viewed

Farm corporations control only a slim share of American commercial agriculture, and most of the firms are family operated. The Economic Research Service surveyed 11,550 farm corporations in 47 states. These corporations accounted for about 1 percent of all commercial units in these states but accounted for 7 percent of land used for agricultural purposes and from 8 to 9 percent of gross farm sales.

Two-thirds of them were family operated. Less than a fifth were controlled by local but nonfarm-related businesses. About two-fifths of them had off-farm interests associated with agriculture, such as feed, fertilizer, and farm machinery concerns.

Livestock Favored—Farm corporations seemed to favor livestock over crops. They usually had larger than average size livestock operations. Corporations growing crops normally produced the same crops as other farms in the area but on larger acreage. Most of them raised soybeans, feed grains, wheat, and hay.

A majority of the corporations had gross farm sales of less than \$100,000, and about two-fifths earned less than \$40,000 a year. More than half had been in business before the current decade. About 40 percent were incorporated between 1960 and 1966, and between 8 and 10 percent were incorporated in 1967 and early 1968.

Tax Incentives—A provision of the tax law appears to have led many farm operators to incorporate. This provision, Subchapter S, helps small corporations avoid double taxation. The subchapter provides the advantages of a general corporation to small corporations having no more than 10 shareholders and only one class of stock. Internal Revenue Service data indicate that the returns of agricultural firms filing under Subchapter S jumped from about 500 in 1958, the year the subchapter was passed, to nearly 5,000 in 1965. Other legal benefits of incorporation include the smooth transfer of a farm or business from one individual to another — with possible reduction in gift or inheritance taxes.