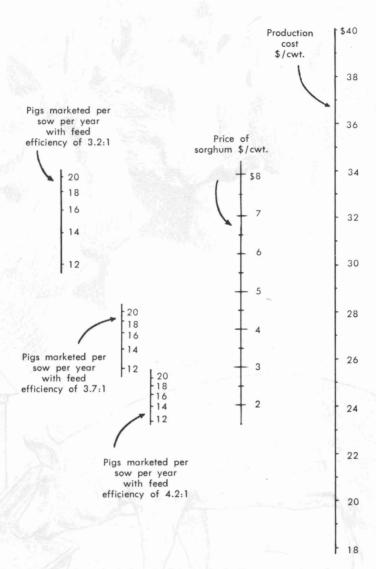
ESTIMATING MARKET HOG COST--FARROW TO FINISH

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Example: Extend a straight line through the feed efficiency, number of pigs marketed per sow per year and sorghum price to find production cost per cwt. of a 240-pound hog.

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Management is concerned with efficiently producing wholesome pork and with the factors which influence the cost of production. The influence of major factors, such as pigs marketed per sow per year, feed efficiency and the cost of sorghum, is demonstrated in the graph,

To use the graph:

Select the expected feed efficiency, based on previous experience, from the three examples on the left side of the graph (4.2:1, typical; 3.7:1, good; 3.2:1, excellent or goal). The feed efficiency value selected should include the feed consumed by the breeding herd. A straightedge laid from pigs marketed per sow per year to cost of sorghum will indicate the estimated production cost per cwt. on the right hand side of the graph.

Using the same expected feed efficiency, a straightedge from expected pigs marketed per sow per year to production cost per cwt. will cross the break-even price payable for sorghum.

The production cost per cwt. column can also be used as the expected selling price for slaughter hogs to calculate profits. For example, a line from sixteen pigs marketed per sow per year, a 3.7:1 feed efficiency and an expected selling price of \$30 per cwt. would indicate that sorghum could be sold for \$5 per cwt. through hogs.

Assume that the right hand column represents the selling price of slaughter hogs rather than production cost. A straightedge from the expected selling price to the cost of sorghum per cwt, will indicate the number of pigs per sow per year necessary to break-even for the three feed efficiencies. Should the line in the left hand column fall below 12 or above 20, fewer than 12 or more than 20 pigs must be produced at that particular selling price and price of sorghum to break even. For example, at a feed efficiency of 3.7, selling price at \$29 per cwt. and \$5 sorghum, more than 20 pigs must be marketed per sow per year. Using the same criteria except a feed efficiency of 3.2, less than 12 pigs per year are required to break even.

The production costs are based on the following assumptions: a capital investment of \$800 per sow capacity; 10-year depreciation; 9 percent interest on operating capital; tax and insurance premiums equaling 1.5 percent of the capital investment; miscellaneous expenses and repairs equaling 1.7 percent of the capital investment; marketing expense of \$1 per head; health supplies, \$1.42 per head; labor, \$3 per head; creep feed, \$10 per cwt.; supplement, \$10 per cwt.

Because of variation in the facility cost and fluctuation of supplement cost, the following

correction factors may be used:

For each \$100 above or below a capital investment of \$800 per sow unit, add or subtract the following to adjust the cost of production per cwt.

| Pigs marketed per sow per year | Add or subtract |
|--------------------------------|-----------------|
| 12 | \$.51 |
| 14 | .43 |
| 16 | .38 |
| 18 | .34 |
| 20 | .30 |

Fluctuation in supplement price from \$10 per cwt. may be compensated for by using the following adjustment:

| Feed efficiency | Change in production cost per cwt. for 40 percent supplement prices of | | | | | | | |
|--------------------|--|-------|-------|--------|------|------|------|--|
| | \$4 | \$6 | \$8 | \$10 | \$12 | \$14 | \$16 | |
| | <u> </u> | | Do | llar – | | | | |
| 3.21 | -3.23 | -2.15 | -1.08 | 0 | 1.08 | 2.15 | 3.23 | |
| 3.7^{2} | -3.78 | -2.52 | -1.26 | 0 | 1.26 | 2.52 | 3.78 | |
| 4.2^{3} | -4.33 | -2.89 | -1.44 | 0 | 1.44 | 2.89 | 4.33 | |

With feed efficiency of 3.2, the hog production cost/cwt. changes by \$.54 for each \$1.00 change in supplement cost/cwt.

With feed efficiency of 3.7, the hog production cost/cwt. changes by \$.63 for each \$1.00 change in supplement cost/cwt.

With feed efficiency of 4.2, the hog production cost/cwt. changes by \$.72 for each \$1.00 change in supplement cost/cwt.

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