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Feeder Pig Production Opportunities in Southeastern Ohio



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FEEDER PIG PRODUCTION OPPORTUNITIES IN SOUTHEASTERN OHIO

by

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Introduction

Many southeastern Ohio farm families have labor and other resources needed for the production of feeder pigs. The grain production base on many southeastern Ohio farms is limited. However, a feeder pig enterprise requires modest amounts of grains. Often, existing, unused poultry houses and dairy barns can be remodeled into a satisfactory feeder pig production facility with a small capital investment.

Demand for Feeder Pigs

Increasing specialization has created a growing demand for feeder pigs; particularly, in the central and southwestern Ohio counties. A well-developed market system exists and southeastern Ohio farmers are proximal to finishing feedlots.

Southeastern Ohio farmers have a location advantage over producers in Kentucky or more distant states that provide Ohio feeders with pigs at present. During the period 1964-1968, the number of pigs shipped into Ohio increased from 184,000 to 242,000 head per year. During the first 6 months of 1969, 150,000 head were shipped

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into Ohio. The number of feeder pigs shipped into Ohio from Kentucky and Tennessee increased from 49,000 head in 1964 to 135,000 head in 1968.

Table 1. - In-shipment of Feeder Pigs
(000 head)

	Kentucky	Tennessee	Other	Total
1964	39	10	135	184
1965	58	13	103	174
1966	56	16	107	179
1967	74	31	116	221
1968	86	49	107	242

Source: Ohio Statistical Reporting Service, USDA, Columbus, Ohio, 1969.

Demand for Ohio produced feeder pigs has been increasing at a rapid rate. Graded feeder pig auctions started with 5 sales being held at two locations in 1959 with 5,451 pigs sold. In 1967, 62,018 pigs were sold at 10 market locations. Additionally, many pigs are sold; through weekly livestock auctions, to dealers and directly to other farmers.

Problem

This study was made to ascertain the profitability of feeder pig production opportunities for southeastern Ohio farmers. First, information about resource availabilities was obtained; second, attitudes of farmers toward the production of feeder pigs were ascertained and third, budgets were developed to evaluate the profitability of a feeder pig activity.

Sample

From randomly selected square mile sample sections, 21 farmers between 25 and 55 years of age and who were not working off of their farms more than 30 hours per week were interviewed. This group of farm operators was considered to have a potential for including a feeder pig production activity on their farms.

Tenure

Twelve of the operators interviewed were full owners, four were part owners and five were tenants. Four of the five tenants operated land owned by relatives. Eighteen of the 21 operators farmed less than 100 acres of cropland. The three operators farming more than 100 acres of cropland were located in the same geographic area of one county.

Livestock

Eight operators maintained a beef cow herd averaging 21 cows and 12 others had an average of 19 dairy cows. Two operators had sheep and 5 owned brood sows. Only one of the five farm operators interviewed had more than 3 sows. Of the three farmers producing feeder pigs for sale, one sold approximately 500 pigs and the other two, 25 pigs each. Three farm operators had a poultry flock ranging from 250-2200 layers.

Land Use

Table 2. - Land Use and Tenure on Twenty-one
Southeastern Ohio Farms, 1966

Item	Acres Per Farm
Land Use	
Cropland	
Corn	22.2
Small grains	15.5
Soybeans	5.1
Hay & rotation pasture	36.0
Other	<u>1.0</u>
Total	79.8
Permanent pasture	56.1
Woodland	35.6
Other land	<u>5.1</u>
Total	176.6

Tenure	
Owned	109.3
Rented	<u>67.3</u>
Total	176.6

Buildings

Buildings are a basic need for a feeder pig production activity. Thus, considerable attention was devoted to the availability and possible adaptation of existing structures. Typically, farms in this study had barns, feed storage buildings, machine sheds, poultry houses and other general purpose buildings.

Five of the 21 operators had some specialized building facilities. The farm operator selling 500 feeder pigs had converted a dairy facility into a 20-sow farrowing house.

Most livestock barns were found to be in use. Tobacco barns generally were used to house livestock, machinery, etc., except during the late summer to early winter when the tobacco crop was curing and in storage. Poultry structures were the most frequent type of building found to be unused and available. Seven operators reported an availability of space in the present buildings which could be satisfactorily converted for feeder pig production. An average of 930 square feet of floor space per farm was found to exist on the 21 farms included in the study. The dairy operators were found to be using most of their building space and reported little available space suitable for feeder pig production without eliminating or reducing the dairy activity. All farm operators reported an adequate water supply and more than half of the operators had pressure water systems installed for present livestock needs.

Labor

The typical farm operator, in the study, was underemployed. Thirteen of the 21 farm operators hired some seasonal labor. No full-time labor was hired. All 21 farm operators indicated they would be willing to hire additional labor if needed and felt they could obtain additional competent help. Eight of the 21 operators engaged in some type of off-farm employment. Four were driving school buses, one was employed by the township trustees, one was a part-time carpenter, another cut timber and one was employed in construction work.

The typical farmer interviewed had enough unused labor so that the farm activity could be increased by 20 percent with the existing labor supply. This would be adequate for the addition of a feeder pig production activity.

Attitudes

An important consideration in the development of a feeder pig enterprise on a southeastern Ohio farm is the operator's attitude. Fifteen men believe that the strong demand for feeder pigs, favorable prices and a surplus of farm labor and buildings provided a good opportunity for this enterprise. Two out of every three farmers interviewed expressed a willingness to consider raising feeder pigs. Two of the dairymen and the one large poultry operator were favorable but felt that the enterprise would be undesirably competitive with existing dairy and poultry activities on their farms. Five operators indicated that they did not believe an opportunity existed, in the area, for the profitable production of feeder pigs. These operators disliked hogs and doubted that a profit could be realized.

In general, the operators studied, lacked knowledge about feeder pig production, costs and returns. However, 19 of the 21 farm operators contacted, knew of the special auction sales being held although their knowledge of prices was meager.

Feeder Pig Potential

Production of feeder pigs was budgeted to ascertain possible labor and management returns. The total investment required per sow was estimated to be \$380. Budgets were developed on an enterprise (36 sows) and farm basis with these assumptions:

Average management, 15 pigs raised per sow with 14 feeder pigs sold at 60 pounds. Eleven gilts would be exposed for breeding for every 10 expected to farrow. Barren and undesirable animals would be culled. Cull sows would be sold at 400 pounds. One-fifth of an acre of land would be required for each sow unit. Farrowing facilities would be used four times each year.

Table 3. - Annual Costs and Returns Per Sow For A Feeder Pig Enterprise Southeastern Ohio (36 Sows)

Item	Per Sow
Gross receipts	
14 - 60 lb. pigs @ .30 per lb.	\$252.00
1 - 400 lb. sow @ .14 per lb.	<u>56.00</u>
Total receipts	\$308.00
Variable costs	
Grain-corn equivalent - 45 bu. @ 1.20 ^a	\$ 54.00
Protein supplement - 675 lbs. @ .06	40.50
Creep feed - 400 lbs. @ .06	24.00
Cost of raising replacement	18.19 ^b
Breeding charge	3.57 ^c
Veterinary and medicine	17.00
Electricity	3.50
Marketing costs	22.50 ^d
Miscellaneous (1% of gross)	3.00
Fixed costs (based on 36 sows)	
Taxes and insurance (livestock)	1.00
Building and equipment charge	26.64 ^e
Land charge - 1/5 acre per sow	3.45 ^f
Interest on livestock and feed	<u>7.14</u>
Total variable and fixed costs	\$224.49
Returns to labor and management	\$ 83.51
Total investment	380.00 ^g
Labor requirement (hours)	20

^aIncludes 10¢ per bushel for grinding and mixing.

^bCost of raising replacement (60 lbs. to 210 lbs.).

^cBoar cost \$125 with a salvage of \$48 after 2 years of use - one boar for each 18 sows, feed cost \$25.70 per year.

^d\$1.50 per pig and cull sow.

^e12% of new building and equipment cost. (Depreciation @ 6.6% + interest @ 3.0% + taxes @ 0.6% + insurance @ 0.2% + repairs @ 1.6%)

^fLand valued at \$150 per acre, interest at 5%, taxes 1.5% and maintenance 5%.

^gLand - 1/5 acre @ \$150; buildings and equipment \$222; livestock \$60; operating capital \$68.

Table 4. - Investment Required for a Specialized Feeder Pig Farm Operation, Southeastern Ohio (176 Acre Farm)

Investment (excluding residence)	
Land - (109 acres @ \$100 per acre)	\$10,900
Buildings and improvements (existing)	5,563
New swine buildings: farrowing house	9,000
nursery	5,000
Swine equipment	5,400
Machinery	7,500
Livestock - (108 sows @ \$56; 6 boars @ \$125)	<u>6,798</u>
Total investment	\$50,161

An average farm size of 176 acres was found in the study. Of this operated acreage 109 acres were owned and 67 acres were rented and 80 acres were used for crop production. A four year rotation was used for the 80 acres of cropland with 20 acres of corn, 20 acres of meadow and 40 acres of meadow. The 21 farmers interviewed reported an average farm land value of \$100 per acre for the acreage included in their farm operation.

The farm investment and income budgets were developed for the average farm situation found in the study. These budgets were developed with the feeder pig enterprise as the only livestock on the farm. Excess grains and hay were sold and pasture rented.

Labor and other resources were available to handle 108 sow units. A total 258 productive work units was used (108 sows x 2.0, 20 acres corn x 0.7, 20 acres small grain x 0.5 and 20 acres harvested hay x 0.9). Approximately one full-time man was employed and received a labor and management return of \$8,980 for the typical year budgeted.

Table 5. - Annual Costs and Returns for a
Specialized Feeder Pig Farm, Southeastern Ohio (176 Acre Farm)^a

Variable cost		
Purchased feed corn (3400 bu. @ \$1.20)	\$4,080	
supplement	7,518	
Fertilizer and lime	900	
Fuel and oil	498	
Electric and phone	720	
Machinery repairs (5% of \$7500)	375	
Seed	240	
Custom combine	250	
trucking	540	
Veterinary and medicine	1,620	
Marketing (1/2 auction, 1/2 at farm)	567	
Hired labor	500	
Supplies and miscellaneous (2% gross)	719	
Cash rent (67 acres @ \$13 per acre)	<u>871</u>	
Total variable costs		\$19,398
Fixed costs		
Depreciation ^b	\$3,578	
Interest (6% of \$50,161)	3,010	
Building repairs (2% of \$19,563)	391	
Taxes (30 mills on 40% of \$30,463)	366	
Insurance (\$4 per \$1,000 of building and equipment)	130	
Livestock tax and insurance @ 1 1/2%	<u>102</u>	
Total fixed costs		\$ 7,577
Total costs		\$26,975
Return		
Feeder pig (1500 head, 120 kept)	\$27,000	
12 gilt (cull)	450	
Sows (105 head - 3% death loss)	5,880	
Small grain (700 bu. @ \$1.25)	875	
Hay and straw	1,650	
Pasture rent (20 acres @ \$5)	<u>100</u>	
Total Return		\$35,955
Net return to labor and management		\$ 8,980

^a Average farm size in study was 176 acres

^b Depreciation - building - old @ 5% (\$700), new @ 8% (\$445),
machinery @ 15% (\$1,125), equipment @ 40% (\$1080), 6 boars
@ \$38 (\$228)

Conclusions

Between 1/3 and 1/2 of southeastern Ohio farmers, in the study, have buildings that could be converted to accommodate 25-30 sows for feeder pig production at a reasonable cost. Many farmers in southeastern Ohio have the labor needed to handle feeder pig production activities of this size. While many farmers could produce some of the grain needed for feeder pig production, returns from the enterprise would justify the purchase of grain.

A budgeted labor and management return of \$85 per sow was possible from an investment in building improvements and foundation livestock of \$380. The number of feeder pigs shipped into Ohio has continued to increase, reflecting greater demand and contributing to favorable southeastern Ohio feeder pig production opportunities.

Income from the feeder pig enterprise is considerably higher with the present market (1969) than was used for the long-term budgets. Production costs have remained constant resulting in a more favorable labor and management return on both the sow and farm basis.

Feeder pig receipts have increased from the budgeted 30 cents per pound to 42 cents per pound for 60-pound feeder pigs*. Sow

*Average Ohio Feeder Pig Prices, October 1969, reported in Agricultural Prices.

prices increased from 14 cents to 18 cents per pound. The annual gross income for a sow producing 14 feeder pigs would be \$352.80 for pigs and \$72 for the cull sow making a total of \$424.80 compared to \$308 budgeted (see Table 3). The labor and management return per sow increased from \$83.51 budgeted to \$200.31 for 1969 or an increase of \$116.20. For the farm with 108 sows, this increase in demand for feeder pigs indicates a labor and management income in excess of \$21,000 in 1969, compared to the long-term budgeted income of approximately \$9,000.

Southeastern Ohio farmers are proximal to a concentrated hog finishing area and can expect that quality feeder pigs will continue in strong demand. This favorable demand, along with favorable labor and management income potential, makes feeder pig production opportunities attractive.