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LARGE SCALE HOG FIRMS

* Are They Coming?

* What Advantages Do They Have?

* Some Legal & Financial Considerations

Some Thoughts On The Place Of Large Scale Hog Firms In Minnesota By:

* A Farmer Managing a 600 Sow Operation

* The PCA People Who are Financing that Operation

* An Agricultural Economist

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LARGE SCALE HOG FIRMS

Current Situation and Future Potential*

by
Paul R Hasbargen

I. Recent trends and current situation in size, organization and type of facilities of hog production units.

A. The 1969 farm census showed that about 12% of the hogs produced in the top 15 hog states came from farms that sold over 1,000 hogs per year. In 1975, this percentage may have reached 20.

1. It has been estimated that total marketings from firms marketing over 1,000 hogs per year accounted for over 15% of 1974 sales in the corn belt - lake states region. A relatively larger proportion of hogs come from large units in regions to the west and south.

2 Table 1 shows the growth in recent years of sales of hogs from firms that sell over 5,000 hogs per year.

a. Marketings out of 550 firms in 1975 made up over 6% of total U S. hog marketings.

b The regional distribution of these 550 large firms is shown in table 2.

c. Table 3 shows the top states in large scale hog operations.

B. A greater and greater percentage of hogs come from specialized hog farms as opposed to many-enterprise farms.

C. As hog production shifts to larger units, the form of ownership tends to shift from single proprietorship to corporate or cooperative.

1. Table 4 shows the types of business organizations found in the 1975 Hog Farm Management Survey.

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* Outline prepared for district meeting at Slayton, Minnesota, March 23, 1976. Credit is due to colleagues Ken Egertson, Vernon Eidman and Richard Hawkins for suggestions on this topic and critique of the outline.

2. A 1975 survey of pig farrowing firms in Nebraska showed the following organizational distribution:

45%	subchapter S corporations (10 or less members)
41%	cooperatives (an average of 27 members)
10%	unspecified (probably individuals or partnerships)
4%	regular corporations

D. Larger scale hog production units tend to be complete confinement operations.

II. Nebraska's feeder pig farrowing firms*

A. Since the first co-op pig firm organized in Nebraska in 1968, the number has grown to about 50 such firms in that state.

B. The investors in these firms are almost all farmers (89%).

1. Most (71%) of these farmers had previously been farrowing their own pigs.

2. Most (54%) have reduced their own farrowings since investing in a farrowing firm. (In fact, 44% have completely quit farrowing)

C. Investors usually contributed 40% or so of total capital needs.

1. The prime organizer was usually a farmer (52% of time) or a feed dealer (26% of time) with 13% being organized by construction contractors.

2. Major financing came from PCA's (32% completely financed), insurance companies (32% partially or completely financed) or banks (50% partially or completely financed).

D. Most units were designed to handle 400 to 450 sows.

1. Average 12 month production in 1974-75 year was 5500 pigs--85% of planned production. (New firms with start-up problems brought the average down.)

2. Average litter size was 8.6 pigs.

E. Costs per pig averaged $29.10 in 1974-75. (facility costs are now higher)

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* All information in this section is from a pending publication, with this same title, by Dennis L. Nun, an Ag. Econ. graduate student at the University of Nebraska.

F. Firms sold pigs to investors for $33.52 for a 37 pound pig in July of 1975.

1. This charge included a debt repayment of $5.97 per pig.

2. Feeder pig prices on the open market in Nebraska averaged $46.75 for a 40 pound pig in August of 1975.

III. Future potential for large scale hog firms.

A. Future growth can be better estimated if we can explain recent growth.

1. Nebraska investors in farrowing firms gave the following as their reasons:

a. To avoid the time and labor requirements of farrowing their own pigs.

b. To get a regular supply of healthy pigs.

c. To avoid paying more than the "cost of production" for feeder pigs.

2. Some probable reasons for the more rapid growth of farrowing firms in Nebraska than in Minnesota are:

a. Feeder pigs have been less readily available in Nebraska.

b. Feeder pig prices have been higher in Nebraska.

(1) Since many pigs must be shipped from the Lake states there are transportation and handling price differences.

(2) In August of 1975, Nebraska farmers reported paying an average of $46.75 compared with an estimated $43-$44 in southern Minnesota. (The average price at the Little Falls, Minnesota market was $40.37.)

c. The financing for large scale hog firms may have been somewhat easier to obtain in Nebraska than in Minnesota.

(1) Nebraska credit institutions had experience financing large scale cattle feedlots.

(2) The early successful firms in Nebraska provided a nearby example.

d. Hog input industries probably "sold" harder in Nebraska once the idea was proven there.

e. Farm size is larger in Nebraska.

(1) Large crop farms require more labor, making it difficult to schedule the multiple hog farrowings that are necessary to justify modern, high cost farrowing facilities.

(2) There are fewer small farms where a labor intense operation such as a feeder pig production or dairy is necessary in order that an adequate farm income can be obtained.

f. Increased irrigation and subsequent grain production in central Nebraska.

B. Future growth of large scale firms will depend upon the success of current operations, plus any future changes in those factors that contributed to the recent growth of these firms in Nebraska and Iowa.

1. Current firms appear to be quite successful.

a. Production performance records look good--even though below projections.

b. Feeder pig production costs have been well below market prices in Nebraska and somewhat below prices in southern Minnesota.

c. Nebraska investors said they were pleased because

(1) They are getting a regular supply of healthy pigs.

(2) They can now buy pigs at "cost of production".

(3) Reduced labor is needed at home--many quit farrowing.

d Thirty-seven percent of investors reported no problems. The problems most frequently reported were

(1) Finding good labor and management.

(2) Finding a good source of breeding stock.

(3) Slow start-up

(4) Disease

(5) Adjustment of pigs coming out of confinement during hot or cold weather

2. Factors that will encourage more expansion:

   a. Financial institutions will be less skeptical.

   b. An increasing number of large scale crop farmers.

   c. Hog farmers are more prosperous--can afford to invest in modern farrowing facilities and hire labor to produce pigs.

   d. Higher feed prices make feed costs relatively more important, putting a premium on the better feed efficiency found in these units.

   e. High cost farrowing facilities are more efficiently utilized in a specialized unit.

3. Factors that would discourage expansion:

   a. Lower feeder pig prices in bottom of hog price cycle (1977-78).

   b. A "back to the farm" movement that is currently underway could keep many young farmers in the pig business in Minnesota (and other states?).

4. Further expansion is expected but it will be:

   a. Primarily in farrowing firms rather than in complete hog units.

   b. More rapid in areas that have relatively few feeder pigs produced locally.

   c. More rapid in areas of higher priced grain.

   d. Largely financed by operating farmers and their credit agencies.

   e. Limited in part by the supply of experienced managers. However, after these are developed, outside investors can be expected to show more interest.

IV. Some cautions for potential investors.

A. Consider the normal hog cycle of four years.

1. Hog prices peaked in 1975.

2. Feeder pig prices will probably bottom in late 1977.

B. Use conservative efficiency factors when making cost projections--especially for the first couple years

(The following table compares some efficiency factors in current projections made by one industry firm compared with plans and the average actually achieved by 20 Nebraska firms in 1974-75.)

	A Current Projection	Nebraska Firms Planned	Nebraska Firms Actual 74/75
Pigs/litter	8 0	--	7 94
Litters/sow/year	2.2	--	2 0
Farrowings/year	1040	903	702
Pig sales/year	8232	6450	5462
Sows/boar	30	--	17

C. Don't be too optimistic in projected hog prices.

1 Our current long run planning price is $36-$38 for market hogs

2 With corn at $2.25 per bushel, this puts feeder pigs at $33-$36 in southern Minnesota.

D The start-up time is usually longer than anticipated. Make a realistic cash flow projection so that you don't run short of operating capital.

E. Put a premium on good management and be willing to pay for it

Table 1. Marketings of Large-Volume Hog Producers

	Total volume (head)	Number Operators Reporting	Average Size of Marketings
1975	5,488,000	549	9,997
1974	4,843,000	541	8,952
1973	4,072,000	507	8,031

Notes (a) Of the 550 operations, one failed to report planned marketings for 1975, and larger numbers did not report for earlier years either because of personal preferences or, more often, their nonexistence at that time.
(b) Planning marketings for 1975 were projected as of March, or April, 1975, when the survey was taken.

Source "Large Volume Agriculture Production in the U.S. - A 1975 Survey, University of Mo~~ntana~~ Agricultural Experiment Station, prepared by V. J. Rhodes and Glenn Grimes.

Table 2. Regional Distribution of Large Scale Units, 1974

	Operations		
Region	Number	Percentage	Percentage of Marketings
West North Central	153	27.6	23.1
East North Central**	141	26.7	22.6
Southeast	117	21.4	28.6
South Central	75	12.8	11.7
West	64	11.5	14.0

** These regions have the usual boundaries used by USDA except that four operations in Pennsylvania and Rhode Island are included in ENC rather than designated the Northeast as a separate region.

Source "Large Volume Agriculture Production in the U.S. - A 1975 Survey, University of Mo~~ntana~~ Agricultural Experiment Station, prepared by V. J. Rhodes and Glenn Grimes.

Table 3. Number of Hog Operations on Hog Farm Management List That Sell More Than 5000 Head Per Year

State	Number of Firms Selling Over 5000 Hogs/Year
Iowa	125
Illinois	115
Indiana	93
Kansas	90
North Carolina	90
Nebraska	71
Texas	65
Minnesota	50

Source Phone conversation with Hog Farm Management personnel, March 22, 1976. (Minnesota currently has 1,070 producers who claim to market over 1000 head per year.)

Table 4. Types of Organizations As Reported by Hog Farm Management Survey Respondent

	Number	Percentage
Individual proprietorship	181	32.9%
Partnership	123	22 4
Feeder pig farrowing corporation	22	4.0
Feeder pig farrowing cooperative	14	2.5
Family corporation	94	17.1
Agribusiness company	50	9.1
Farm corporation	63	11.5
Other (state institutions, etc.)	3	0.5
	550	100.0

Notes (a) A "farm corporation" is a residual classification for those non-family corporations which are not agribusiness companies nor feeder pig corporations. (b) About half of the "family corporations" were subchapter S organizations. (c) All except one of the feeder pig corporations were subchapter S.

Source "Large Volume Agriculture Production in the U.S. - A 1975 Survey, University of Montana Agricultural Experiment Station, prepared by V.J. Rhodes and Glenn Grimes.

Large Scale Hog Operations--An Owner's Viewpoint
Con-Fed Inc. - Mountain Lake, Minnesota

by
Marlin Pankrantz*

I. Con-Fed's History

A. Located at Mountain Lake, Minnesota

B. Family corporation subchapter S

C. Father and three sons

D. First confinement unit 1970
   1. Finishing barn
   2. 1300 head capacity

E. Expanded to farrowing in August of 1975

F. Building is of own design and construction

G. Farrowing barn has capacity of 600+ sows

H. Barrows are sold at 40# as feeder pigs

I. Pigs are weaned at four weeks

J. 160 farrowing crates

II. So You Are Interested in a Larger Operation

A. Questions to consider
   1. Raise hogs cheaper? - no
   2. Labor available - family labor - how long?
   3. Better job raising hogs than raising crops or other livestock
   4. Quality improvement - yes
   5. Easier work? - no just different
   6. Do you like hogs? - yes

B. Look at other facilities--this is a must--take your financial man along

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* One of the farmer owners of this family corporation.

C. What kind of facility?
   1. Environmentally regulated
   2. Cold

D. What breeding method?
   1. Hand
   2. Pen

E. Breeding stock source

F. What kind of Operation?
   1. Feeder pigs
   2. Farrow to finish

G. Who is going to manage the operation
   1. Involve manager in building plan
   2. Involve manager in equipment choice

H. How are you going to organize
   1. Corporation
   2. Partnership
   3. Co-op
   4. Individual

I. How are you going to dispose of waste and dead animals

J. Get a reputable builder and equipment supplier--check carefully

III. Disadvantages of a Larger Unit

A. Higher level of management needed

B. Problems can get out of hand quicker and take longer to correct

C. Cost of producing a pig may not be less than a smaller unit
   1. Older building
   2. Family labor
   3. Waste removal

D. Finding right kind of labor or managing the labor you hire

E. Inability to move in and out of production rapidly

F. Disease and waste potential are problems

G. Questionable resale value of capital investment

IV. Advantages of a Larger Unit

A. Remove peaks and valleys of marketing and cost flow

B. Remove peaks and valleys of labor requirements

C. Management is able to concentrate on swine management

D. A better position on buying inputs

E. High price top quality equipment can be spread over more animals

F. Possibly less cost per head than a small unit with lesser quality animals

G. Good steady outlet for produced feeder pigs is more likely in a large unit

H. Large units can be more flexible in time off and weekend duties

Table 1. Con-fed's facility cost for a 600 sow unit with finishing facilities for about half the pigs

Facilities	Sq. Ft.	Per Sow	
Building with all equip., office, generator, well 39,000 sq. ft.	13.65 per sq. ft.	$ 890.00	
Finishing barn and equip. 1970, 9,600 sq. ft.	4.00 per sq. ft.	64.00	capital for only one half production
Feed processing and limited storage		17.50	
Lagoon and waste disposal (est.)		42.00	
Total Per Sow		$1,013.50	
Grain handling and scale 300 ton bulk and 70,000 bu.		$ 140.00	
Land		?	
Breeding stock		?	
Operating capital		?	

Some Legal and Financial Considerations in Setting Up a Feeder Pig Corporation

by
Richard Noyes*

I. Implementation

A. Permits - getting permits from the county and approvals from the Pollution Control Agency and Department of Natural Resources on the lagoon setup.

B. Water testing - should have two wells with a setup of this kind with one being a stand-by.

C. Location of building site, disposal system and a lagoon. (Also build house for the manager.) One other important factor is a generator that is hooked up to go on when the electricity goes off.

II. Incorporation

A. Setting up corporation, legal documents, charter and by-laws of corporation.

B. Election of officers from the group of investors with each officer holding a office for one year or designated period of time. (President, Vice President, Secretary, Treasurer)

C. Issuing corporation stock - the investors who were forming corporation would put capital funds into the corporation and would receive shares of stock. The percentage ownership of stock would be the same as the percentage of pigs each investor would buy from the corporation.

D. Corporation would hold periodic meetings with all investors (directors) present. They would keep a corporation record book of all meetings that took place and events that transpired at the meetings. PCA would like to have the privilege of attending these meetings but would not have any voting power.

III. Management

A. Manager of operation - is one who has to be very knowledgeable in the hog industry, has to have managerial and supervision abilities. He has to be able to delegate responsibilities and see that they are carried out.

B. Additional help - people would have to be willing to learn about hog operation, would have to be dependable and trust worthy.

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* Production Credit Association, Windom, Minnesota

C. Manager would report only to the president of corporation. President would be only one allowed in building on frequent visits. President would report to the board of directors. If board had any comments or suggestions they would communicate through president to manager.

D. Manager should not be a stockholder of corporation. His salary should be on an incentive basis as to performance of farrowing unit.

IV. Loan Proposals and Approvals

A. Capital loan - finance the land, building, equipment, lagoon and house. Would be a term loan set up into a ten year repayment plan into a seven year loan.

B. Breeding livestock loan - finance the initial breeding livestock. Would also be a term on a three to five year loan depending on dollar amount.

C. Operating loan - would be an annual loan with an annual review
   1. Would cover all operating expenses.
   2. Covers all replacement costs of breeding stock.
   3. Would include monthly payments.
   4. The flow of money would be projected on a cash flow projection sheet.

D. Repayment
   1. Term loan payments would be made monthly from the operating loan.
   2 Operating loan - all feeder pig sales would be applied toward operating loan.
      a. A pre-determined price would be established for feeder pig sales.
      b. Cull sows and boars sales would be applied toward loan.

E. Signatures and guarantees
   1. All the officers of corporation would sign papers as officers.
   2. All individual investors would sign the loan papers also and individually would guarantee a certain percent of the loan.
   3. Overlapping of guarantees
      a. Stronger investors covering weaker investors.

V. Financial Statements

A. When corporation was set up we would need a financial statement of each investor plus two years income tax reports giving us an idea as to size of his individual operation.

B. Each year we would want a financial statement of each investor and of the corporation.

VI. Additional Requirements

A. Corporation loan agreement with PCA spelling out the specific terms of the loan contract and including things such as·
   1. PCA would be listed as payee on all insurance policies covering building, equipment and livestock.
   2. No dividends would be paid out until corporation is in a pre-determined cash position.
   3. No sale of corporate stock to outside individuals without PCA permission

B. Records
   1. Require monthly income and expense reports of operation.
   2. CPA audit of books.
   3. Possible use of Agrifax.

Table 1 Current capital requirements, projected annual costs and breakeven feeder pig prices for the first two years at several production levels

Capital	
Building and equipment	$370,000
House for manager	30,000
Wells	8,000
Grading	5,000
Land	20,000
	$433,000
Breeding livestock	
460 head (gilts or sows) @ $200	$101,200
20 head (boars) @ $400	8,000
	$109,200

Projected Feeder Pig Cost Basis - 1st Year

Building loan - interest (9%)	$ 38,970
(10% depreciation) Principal	43,300
Livestock loan - interest (9%)	9,828
Principal payment	36,400
Labor	30,000
Feed	83,032
Vet	3,000
Insurance and taxes	6,000
Repairs	3,000
Supplies	3,000
Fuel and miscellaneous	3,500
Interest on operating loan	7,000
Utilities	10,000
Total Costs	$277,030

Breakeven price per pig		
460 sows	16 pigs per sow	$37 61
	18 pigs per sow	$33 45
	20 pigs per sow	$30 11

Projected Feeder Pig Cost Basis - 2nd Year

Building loan - interest (9%)	$ 35,073
(10% depreciation) Principal	43,300
Livestock loan - interest (9%)	6,552
Principal payment	36,400
Labor	30,000
Feed	90,000
Vet	4,000
Insurance and taxes	8,000
Repairs	4,000
Supplies	5,000
Fuel and miscellaneous	4,000
Interest on operating loan	5,500
Breeding replacement cost (115 head @ $200/head)	23,000
Total Costs	$304,825
Less cull sow sales (100 head @$125/head)	-12,500
NET TOTAL COSTS	$292,325

Breakeven price per pig		
460 sows	16 pigs per sow	$39.71
	18 pigs per sow	$35.30
	20 pigs per sow	$31.77