

**Farmer's Cooperative and the
City of Keota, Iowa: A Case Study**

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Farmer's Cooperative Keota, Iowa

Introduction:

Keota is located in Keokuk County which is in the southeastern part of Iowa. It is a small rural community of 967 citizens (1996). The community is heavily dependent upon agriculture with hog production being a major farming enterprise. In 1991, Keokuk County had 210,700 hogs, 1.4 percent of the total number of hogs in Iowa.

In 1996, hogs were the second most important agricultural commodity in Iowa, behind corn. Hogs represent more than 23.3 percent of the state's total agricultural receipts (Iowa Fact Sheet). In 1997, Iowa ranked number one among all U.S. states in hogs on hand, constituting 22 percent of the total number of hogs in the U.S. But a major concern is the trend towards fewer but larger hog farms, and a decline in the total number of hogs in the state. In 1987, there were 40,000 farms with hogs, distributed over 37 percent of all Iowa farms. While the total number of Iowa farms declined by just 8.4 percent from 1987 to 1996, the number of farms with hogs declined 47.5 percent to 21,000 farms. The December 1 inventory of hogs in Iowa increased from 13,900 in 1987 to 15,000 in 1991, but has decreased by 18.6 percent to 12,200 head in 1996. This compares to a 11.4 percent increase in U.S. hog numbers during the 1986 to 1996 period. Iowa's share of the total number of U.S. hogs dropped from 25.8 percent in 1986 to 22 percent in 1996. The traditional Iowa hog producer with less than 500 sows is struggling to compete with much larger, more modern, and more labor efficient hog operations. The capital costs and associated market risks are real barriers to entry into hog production by younger people. Consumers, and in turn the pork processors, demand a consistent high quality and uniform pork product. This requires specific genetic traits and hog production management practices. The coordination of hog production all the way to the consumer is becoming increasingly important. The relatively smaller hog producers are challenged in meeting these requirements. Hog production provides a value added market for the state's corn crop, a market for other feed stuffs and various farm services and equipment, and a source of related employment in the marketing, slaughter and processing sectors. The potential economic impact of these production and marketing changes and the decline in both the number of farms with hogs and total hog numbers on rural communities, is a major concern to Iowa.

Farmland Industries, Inc., henceforth referred to as Farmland, a regional farm supply, grain marketing, and hog processing cooperative headquartered in Kansas City, Kansas, is providing its local cooperative members with alternative hog production contractual arrangements. The farmer-members of the locals can take advantage of these hog production contractual arrangements and be competitive in hog production and marketing. This Farmland Swine Program is an alternative to the large integrated hog production systems and is designed to assist smaller hog producers to effectively compete with relatively large hog operations. This swine program provides an alternative for the young person to enter hog production. Local farm supply cooperatives benefit from feed sales and other services provided to their members. Further, it is thought that these relatively small family operated hog operations may have a tendency to support local businesses, that the farmers live in and support their local community, and that the operations are more environmental friendly than their larger counterparts.

It is for these reasons that Farmer's Cooperative, Keota, Iowa was selected as a case study. The co-op and its farmer-members have participated in the Farmland Industries, Inc Swine Program. The implementation of this program, its success, and its economic impact on the cooperative and the community of Keota, provide an excellent lesson for others to learn by.

Farmer's Cooperative of Keota and the community of Keota, Iowa was visited on December 29 and 30,1997. Board members, members, management and local citizens employed in Keota where interviewed. The interview team members were: Dr. Robert Cropp, University of Wisconsin, Madison; Dr. Roger Ginder, Iowa State University; Dr. Evert Van der Sluis, South Dakota State University; and Kim Zeuli, University of Minnesota.

The Community of Keota, Iowa:

The population growth of Iowa has been slower than the national average, increasing by 2.7 percent from 1990-1996. However, like many rural Midwestern communities, Keokuk county and the city of Keota experienced a decline in population during this period, 0.3 percent and 3.1 percent respectively (U.S. Bureau of the Census, USA Counties). While the population percentage of those of 18 years of age or less is about the same for Keokuk county, the state of Iowa, and the U.S. (25.9% of the total population), that of Keota is relatively lower (21.1% of its total population)(Table 1). Both Keokuk County and Keota have a larger percentage of their populations of age 65 and older, 20.8% and 28.6% respectively, than does Iowa and the U.S.. These population characteristics are typical of many Midwestern rural communities. Young people migrate away from these rural communities because of limited employment opportunities and lack of consumer goods and services.

Table 1: Age Profiles of Keota County and Keota, Iowa, the state Iowa, and the U.S., 1990 Census.

Age Profile	Keokuk County	Keota	Iowa	U.S.
% Under 18 years	25.9	21.1	25.9	25.7
% 18 to 64 years	53.3	50.3	58.7	61.8
% 65 years or older	20.8	28.6	15.4	12.5

Source: U.S. Bureau of the Census. *Iowa's Counties, 1997 edition.*

The population of Keota and Keokuk County is predominately white, 99.19 percent and 99.39 percent respectively. This compares to 95.97 percent white population for the state of Iowa.

The level of education among the people of Keota age 25 or older shows that 16.1 percent of the population completed less than a 9th grade education, 11.9 percent were educated beyond the 8th grade, but do not have a high school diploma, 43.4 percent do have a high school diploma, 13.7 percent have some post high school education and 14.9 percent have an associate or college degree.

In 1990, there were 440 housing units in Keota, 25 of which were vacant. Seventy-nine percent of the homes were owner occupied and 21 percent were rented. The average value of owner occupied units was \$33,330 and the median gross rent per month was \$237. Although there isn't a shortage of housing, there has been little construction of newer homes or rental apartments in recent years. The median year housing units were built was 1943.

The unemployment rate for Keota (4.7%) is similar to that of Keokuk County (4.5%) and the state of Iowa (4.3%) (Table 2). But the average per capita income of \$11,174 is considerably below that of Keokuk County, the state of Iowa and the U.S. This reflects the older population of Keota and lower wage employment opportunities relative to the state or the nation as a whole. Almost 5 percent of occupations in Keota were engaged in farming, 21.8 percent in managerial or professional positions, 23.8 percent in technical, sales or administrative support positions, 15.1 percent in service occupations and 34.5% in other types of occupations. Despite a lower per capita income, the percent of the population below the poverty level was lower for Keota (10%) than that of either Keokuk County, the state of Iowa, or the U.S. as a whole.

Table 2: Labor Force Unemployment Rate, Percent Below Poverty Level, and Per Capita Income Of Keota, IA; Keokuk County, IA; Iowa and the U.S., 1990

	Keota	Keokuk County	Iowa	U.S.
% unemployment	4.7	4.5	4.3	
% below poverty level	10.0	13.1	11.5	13.5
Per Capita Personal Income	\$11,174	\$15,373	\$16,953	\$19,142

Source: *Iowa's Counties, 1997 edition. Pp 111,121, 126*; U.S. Bureau of the Census.

Over 46 percent of the civilian labor force are women. Over 95 percent of these women were employed. Therefore, two income households are common in Keokuk county.

The number of establishments by industry in Keokuk County from 1985 to 1994 declined by 30 (297 to 267) from 1985 to 1994 (Table 3). The biggest decline was in wholesale trade (50 to 36). The biggest increase was in transportation, communications, and utilities (13 to 29).

Retail sales for Keokuk County have declined almost every year since 1985. From 1985 to 1995, retail sales declined 16.2 percent from \$40.7 million to \$34.1 million. Data suggest that residents of Keokuk County are commuting to larger shopping areas, such as Iowa City, to purchase goods and services. Potential retail sales, which is a formula that estimates the amount of money that could be spent on retail goods and services by residents of a county, shows Keokuk County only has 59.6 percent of potential retail sales.

Land values in Keokuk County have been impacted by the financial status of farming. Agricultural land values averaged \$1,740 per acre in 1981. The drastic decline in grain prices that occurred in the early 1980's sharply reduced net farm income among Iowa's grain farmers. As a consequence, land values declined sharply to just \$763 per acre by 1987. Since then the

financial status of Iowa's farmers has improved and although land values have not returned to the highs of the early 1980's, land values averaged \$1,329 per acre in 1995.

Table 3: Number of Establishments by Industry in Keokuk County, 1985-1994

Establishment	1985	1990	1994
Agricultural Services, Forestry, and Fishing	10	6	9
Mining	4	4	3
Construction	23	17	21
Manufacturing	8	13	13
Transportation, Communications, and Utilities	13	25	29
Wholesale Trade	50	40	36
Retail Trade	76	71	66
Finance, Insurance, and Real Estate	24	19	24
Services	62	67	65
Unclassified	27	16	1
Total	297	278	267

Source: County and City Data Books and County Business Patterns, University of Virginia Library Social Sciences Data Center.

Farmer's Cooperative of Keota:

Farmer's Cooperative of Keota, Iowa, is a local farm supply and grain marketing cooperative. It is a member of the Farmland, the largest regional cooperative in the U.S. Gross sales at Farmer's Cooperative totaled more than \$22 million in 1997. Agronomy accounts for almost 21 percent of the gross sales, grain 28 percent, feed 18 percent, petroleum 12 percent and other farm supplies about 1 percent. Membership totaled 668 in 1997 of which 550 were class A members (farmers) and 118 class B members (non-farmers). The cooperative employs 47 people.

Farmer's Cooperative-Farmland Swine Program Collaboration:

Farmer's Cooperative of Keota participates in the Farmland Swine Program. Through this program its farmer-members can participate in the Farmland pork system. This system is focused on the farmer-owners raising quality animals to supply the leaner pork that today's consumers prefer. This is accomplished through two different programs, an alliance farm system and a contract building system. The alliance system provides a single source of high quality feeder pigs to hog farmers who are members of one of Farmland Industries, Inc's. member local farm

supply cooperatives. Ownership of the production facilities and the hogs is retained by the farmer. The farmer-member accepts all risks and reaps all returns to production. The farmer-member benefits from the following services of the alliance farm system:

- 1) Hog expansion assistance including construction guidelines and simplified financing. The Cooperative Finance Association also provides for financing of feeder pigs, and feed.
- 2) Source of quality genetic feeder pigs to finish out.
- 3) Marketing agreements with Farmland that include market price risk sharing programs, futures contracts, and carcass merit pricing.
- 4) Access to swine specialists to assist with management.
- 5) Services and feed provided by the local farm supply cooperative (In this case, Farmer's Cooperative of Keota).

Through this alliance system, relatively small independent hog farmers have the same genetics, management expertise, and marketing coordination as do relatively large hog operations. The alliance hog farms are competitive with these larger operations and remain profitable. Therefore, it is a means for the smaller hog farmers to profitably stay in business.

Under the contract building system farmer-members invest in the hog finishing buildings and provide finishing labor. Farmland owns the farrowing facilities, retains ownership of the pigs with the price and production risks, and provides the feed and health maintenance costs. In some contracts, a premium is paid for reaching certain performance standards, but most participating farmers are paid a guaranteed payment per pig space.

Both the alliance system and the contract building program require that the hog farmer purchase feed from the local cooperative, if his/her farm is located within a 25 mile radius of the cooperative. This agreement holds for a period of 10 years, after which a farmer is free to purchase feed from an alternative supplier. The local cooperative benefits through a growth in feed sales and other provided services from these contractual arrangements.

Findings From The Interviews:

Key Events/Decision Points:

Management of Farmer's Cooperative observed how the hog industry in Iowa was changing. An Iowa State University Extension swine meeting focused on the structural changes in hog production. Information from this meeting confirmed the thinking of management and some board members that some action was required to ensure that hog production would remain in the local community. Not only were the number of hog farmers declining, but competition was offering various services (record keeping, for example) to hog farmers and taking farmers away from Farmer's Cooperative. The board decided that Farmer's Cooperative also needed to provide hog producers with new services. Farmland was approached for assistance. The result was that a swine specialist was hired by Farmland, who would provide some management services to Farmer's Cooperative members

The management and board of Farmer's Cooperative decided to invite a Farmland representative to a board meeting to discuss what Farmland could offer to maintain and grow hog production in

Keokuk County, Iowa. The representative spoke of contractual relationships with Farmland. This meeting was followed up with other sources of information on what was occurring with hog production--industry magazines, attendance at hog production meetings sponsored by the Iowa Institute of Cooperation and additional information provided by Iowa State University. For almost a year, at each monthly board meeting, the hog production program offered by Farmland was discussed. The on-going changes in the hog industry made board members look beyond their own farms, and consider the interest of the cooperative as a whole. A decision had to be made whether to encourage hog production, which would require Farmer's Cooperative to spend capital on a new feed mill, or to consider capital expenditures for alternative member needs. The feed department of Farmer's Cooperative studied the potential benefits and costs to the cooperative of a collaborative arrangement with Farmland.

After the initial ground work was done, the management and board decided a proposal for collaborating with Farmland's swine program would be presented to the general membership. Three membership meetings at three different locations were held. Information presented at the meetings included structural changes in the hog industry, producing the type of hog the packers demanded, and the swine program offered by Farmland. The information was provided by representatives from Farmland, Iowa State University, the local farm credit association, management of Farmer's Cooperative, and a hog farmer from another area of Iowa who was involved in Farmland's swine program. Much of the discussion and many questions centered around whether it was right or proper for Farmland or a local cooperative to be involved with contractual arrangements for expanded hog production. The reaction ranged from those who thought it was a great idea to those who look at contractual arrangements as a threat to their own hog operations. At the end of each meeting, a straw pole was taken as to how to proceed. Based on the reaction of these membership meetings, the board decided to go forward to further consider Farmland's swine program. Because of this decision, initially some members of Farmer's Cooperative became upset and quit doing business with Farmer's Cooperative. But before Farmer's Cooperative could officially go forward with the Farmland swine program, it required approval by the membership. This is a requirement of the State of Iowa where contractual arrangements between cooperatives and hog farmers are involved.

It took three years to go from the idea to the completion of the first contractual hog operation. But during the next 18 months, hog production facilities really took off. Through membership meetings and other educational efforts of Farmer's Cooperative, with the assistance of Iowa State University, the Iowa Institute of Cooperation, and Farmland's representatives, the membership became educated about the changes in Iowa hog production and the potential costs and benefits of contractual hog production.

A few problems did surface initially with the swine program. Some members felt that Farmland did not adequately disclose all the information that was required for farmer to make a rational decision on whether or not to sign a binding hog production agreement with Farmland. The comment was made that many details of the contractual arrangements were not revealed until the deal was close to completion. The alliance farms program had a rough start with the interruption in feeder pig flows resulting from start-up and disease problems (PERS). There appeared to be management and employee problems at Farmland's sow facility at Yuma, Colorado. The result

was higher feeder pig costs than expected. But since then, the alliance farm members appear to have been quite satisfied with the Farmland program.

There were few problems encountered with the contract building program. Early contracts were better than later ones in terms of premiums paid by Farmland to program participants. There was some feeling that alliance farms got better feeder pigs because they had investments in the farrowing facility. Initially some members experienced difficulty in obtaining reasonable credit to enter the program. Since then local financial institutions have gained experience from these contractual hog production arrangements and have more confidence in their potential.

Major Reasons Why Some Members Have Participated in the Swine Program:

Major reasons why some of members of Farmer's Cooperative of Keota have participated in the alliance program are:

- 1) A single source of high health status pigs.
- 2) Wanted consistent genetics in pigs.
- 3) Wanted pigs on a regular basis or a known schedule without having to search in an increasingly limited market.
- 4) Wanted to get out of farrowing for several reasons:
 - Labor involved competed with other activities such as cropping.
 - Didn't have adequate facilities to farrow efficiently.
 - Could not farrow at competitive cost without heavy financial investment.
 - Farrowing is becoming more technical.
 - Cost of production to farrow pigs was higher than anticipated cost of production from alliance farms.
 - Alliance farms was a lower risk alternative than farrowing themselves-overall the best alternative.
 - Farmland's marketing agreement assured a market for production that would recognize the value of good genetics.
 - Wanted to have an ownership position in the livestock sector rather than contract to produce.

As can be seen, the reasons for joining were numerous, but basically fit a need for changes in the operation due to changes in the hog industry. The farmers generally trusted Farmland and Farmer's Cooperative of Keota.

Major reasons why some of members of Farmer's Supply Cooperative of Keota have chosen to participate in the contract building program include:

- 1) Wanted to exit farrowing and the associated labor required.
- 2) Could get financial backing for building a finishing unit.
- 3) Reduced risk in the market price and hog production.
- 4) Less management time and effort required.
- 5) Reduced capital required for hog production, that is, it freed up labor for cropping.
- 6) Retain enough regular cash flow to service debt on the finishing building.
- 7) Can concentrate on other enterprises, such as cropping.

Impacts of the Swine Program:

A) Impact on Farmer's Cooperative and members: The impact on Farmer's Cooperative has been very positive. The cooperative now has a very modern feed mill to efficiently and competitively serve its members. Without the swine program feed sales would not have justified the capital investment in the feed mill. Members not involved with the contractual swine program, but produce hogs or other livestock also benefit from this modern feed mill operating near to capacity. The expanded feed stuffs and feed management expertise now possible with expanded feed business benefits all hog and livestock members. The expanded hog production in Keokuk County has also improved the market for corn grown by crop farmers. Local corn prices are stronger as a result. Farmer's Cooperative has hired a grain marketing person and is expanding into providing members with precision agriculture.

Farmer members who have contractual arrangements with Farmland have been able to reduce market risk exposure in hog production. The swine program has helped younger members to obtain the necessary resources to enter hog production. Without this program, these younger members would very likely not be in hog production.

Since the start of the swine program, trust in the cooperative system by members seems to have increased. They know the cooperative will be there to serve them in the future, and there exists a mutual long term commitment. The swine program forced members to become educated on issues at stake in hog production. Members obtained knowledge about the choices for hog production in the future. These contractual hog operations have become more socially acceptable in the Keota community.

Table 4 summarizes the impact of the swine program and other business initiatives by Farmer's Cooperative over the past 10 years (1987-97). As can be readily seen, Farmer's Cooperative has had very strong growth in all of its business activities. Gross sales increased 146 percent from \$9,023,899 to \$22,220,965. This growth certainly can not all be attributed to the swine program. But, the swine program enabled the Cooperative to expand its feed business. As is often the case in such situations, strong business growth in one area enables the cooperative to expand its services to members in other areas. Members supported the cooperative from more than one or two business services. Since 1987, membership increased 106 percent, from 324 to 668 members. Both class A and class B membership increased. Feed sales, primarily the result of expanded hog production, increased 126 percent during the past 10 years. Higher feed sales and sales of other products increased employment opportunities in Keota. Employment at the Cooperative increased from 23 people ten years ago to 47 employees today, a significant increase for a community of less than 1,000 residents.

Table 4: Growth in Business By Farmer's Cooperative, Keota, Iowa, 1987-97

Business Activity:	1987	1997	Percent Change
Gross sales:			
Grain	\$2,311,190	\$ 6,083,798	163%
Feed	1,760,282	3,993,924	126%

Agronomy	3,201,282	9,037,313	182%
Petroleum	1,533,858	2,722,814	78%
Farm Supply	168,135	233,649	39%
Feed Grind & Mix	<u>49,152</u>	<u>149,467</u>	204%
Total	\$9,023,899	\$22,220,965	146%
Number of members:			
Class A	272	550	102%
Class B	<u>52</u>	<u>118</u>	126%
Total	324	668	106%
Number of Employees	23	47	104%

B) Impact on the Keota community: Overall, the swine program has helped Keota survive as a viable community. The citizens and businesses recognize the economic importance of hog production on their community. The result has been an enhancement of local businesses and in turn employment. It has enabled younger people to find employment and to stay in the community. Local merchants have gained revenues due to direct and indirect multiplier effects. Increased local profits has increased the availability of credit from the local bank. The construction of hog facilities has provided employment for local building contractors. Hog production has increased the need for local veterinarians. The additional employees of the cooperative and other businesses has had a positive impact on local restaurants, the grocery store and other consumer goods providers. Furthermore, the tax base in the county has increased, and there has been increased interest in the community by employees and community leaders. A new library has been built and improvements have been made in the local park. The cooperative itself has benefited non-members with heating and air conditioning services, a gas station, tire service, lawn fertilizers, pet foods and a credit card that can be used at the cooperative. The cooperative also provides the community with much needed competition for both agriculture and some consumer goods and services.

Priorities for research:

Research activities were considered quite important to the success of cooperatives. Ranked as the first research priority were case histories of successful and unsuccessful cooperatives. What makes for successful versus unsuccessful cooperatives would perhaps help others to avoid making similar mistakes. There are new cooperative models and/or business arrangements surfacing, but not many are very well acquainted with them or their success. Critical success factors for cooperatives were ranked as a close second as a research priority.

Ranked third was research that would develop better guidelines for creating a cooperative or new cooperative business venture. Assessing the economic returns from cooperatives was ranked fourth. This was closely connected to the educational programming priorities that follow below. Boards of directors, members and potential members could benefit from documentation of the benefits from doing business under a cooperative system. Ranked not as important, fifth, was research on the critical community economic issues. Ranked sixth, yet important, was research that would identify when to use the cooperative model versus other business arrangements.

Research on these types of issues was identified as a current and ongoing need.

Priorities for educational programming:

Risk assessment and management ranked first in educational programming. There appeared to be a strong sense that both the board and its members need to be better prepared to assess risk, and to manage the risk from relatively large debt capital commitments.

Due to the complexity of business decisions and the responsibility of the board of directors in protecting the equity of the cooperative, board of director training was ranked very important. This ranked second in the educational programming area.

Ranked a close third were leadership training programs. Ranked fourth, but yet as an important activity, was educational programs on the cooperative basics. Some felt strongly that the future of the cooperative depended very much on the board, members, and even the management's understanding of the uniqueness of the cooperative business as compared to other business structures.

Educational programming in these areas was identified as an on going need.

Priorities for technical assistance:

Technical assistance priorities that were quite similar for board members, management and non-members. There were some differences in individual responses, but not by these three groups. Ranked as the first priority was risk assessment. This corresponds to the number ranking of risk assessment and management as the first priority in educational programming. Hog producers who were members of the cooperative needed assistance to identify and to analyze the associated financial risks from investing in hog production facilities. The cooperative itself could benefit from outside assistance in measuring the risks involved from new capital expenditures into new services and facilities.

Not surprisingly, a close second was assistance in doing strategic planning for both the cooperative and as a service provided to its members for their farming operations. Initially, Farmer's Cooperative relied on outside expertise to assist the board of directors in doing strategic planning for the future of the cooperative, which included the swine program and the need for a feed milk versus other capital investment alternatives.

Ranked third was financial management. However, this was viewed more as a service to the members of the cooperative than a need for the cooperative itself.

Market research, although identified as the fourth most important technical service, was still ranked as important. Some of this ties into the strategic planning assistance, in terms of identifying the market potential for new services or products.

Each of these technical services were identified as on going needed activities. Strategic planning, for example, is something the cooperative needs to do every year, or a least every other year.

Key opportunities/challenges:

For the most part, the opportunities and challenges were identified in the discussion of priorities in research, education and technical assistance. Although Farmer's Cooperative was able to rely on outside expertise in coming to a decision on whether or not to encourage its membership to participate in Farmland's Swine Program, and to then build a new feed mill, additional no-bias information and technical assistance would have been beneficial. It was very evident that the board and management greatly appreciated the information provided by both Iowa State University and the Iowa Institute of Cooperative, both institutions were crucial in this decision process.

Management identified two major challenges/opportunities. First, the need to educate farmer-members on the new technologies that appear to be coming forth on a constant basis. Second, to assist farmer-members in assessing the benefits and costs associated with adopting or not adopting a new technology.

Both the board and management indicated that there are real challenges associated with informing the membership and potential members of the economic benefits of the cooperative system. Further, board members are expected to be visionaries to identify the changes that are coming in agriculture and the food system and to help management prepare the cooperative for these changes, in a manner that is best for members. This includes the consideration of new business arrangements with other cooperatives and non-cooperative businesses.

Not brought out by those interviewed were concerns by citizens, both producers and non-producers, of environmental concerns from larger hog operations and associated odder problems. Iowa has experienced citizens raising both of these concerns. It should be recognized that environmental and odder concerns are issues that must be addressed in any hog or livestock expansion project.

In conclusion, both board members and management expressed real pleasure in the fact that universities from states in this Fund for Rural America Planning Grant were working together to identify a need for a Cooperative Enterprise Center. It appeared that their general opinion was that such a center would serve existing and potential cooperatives very well in education, research and some technical assistance.