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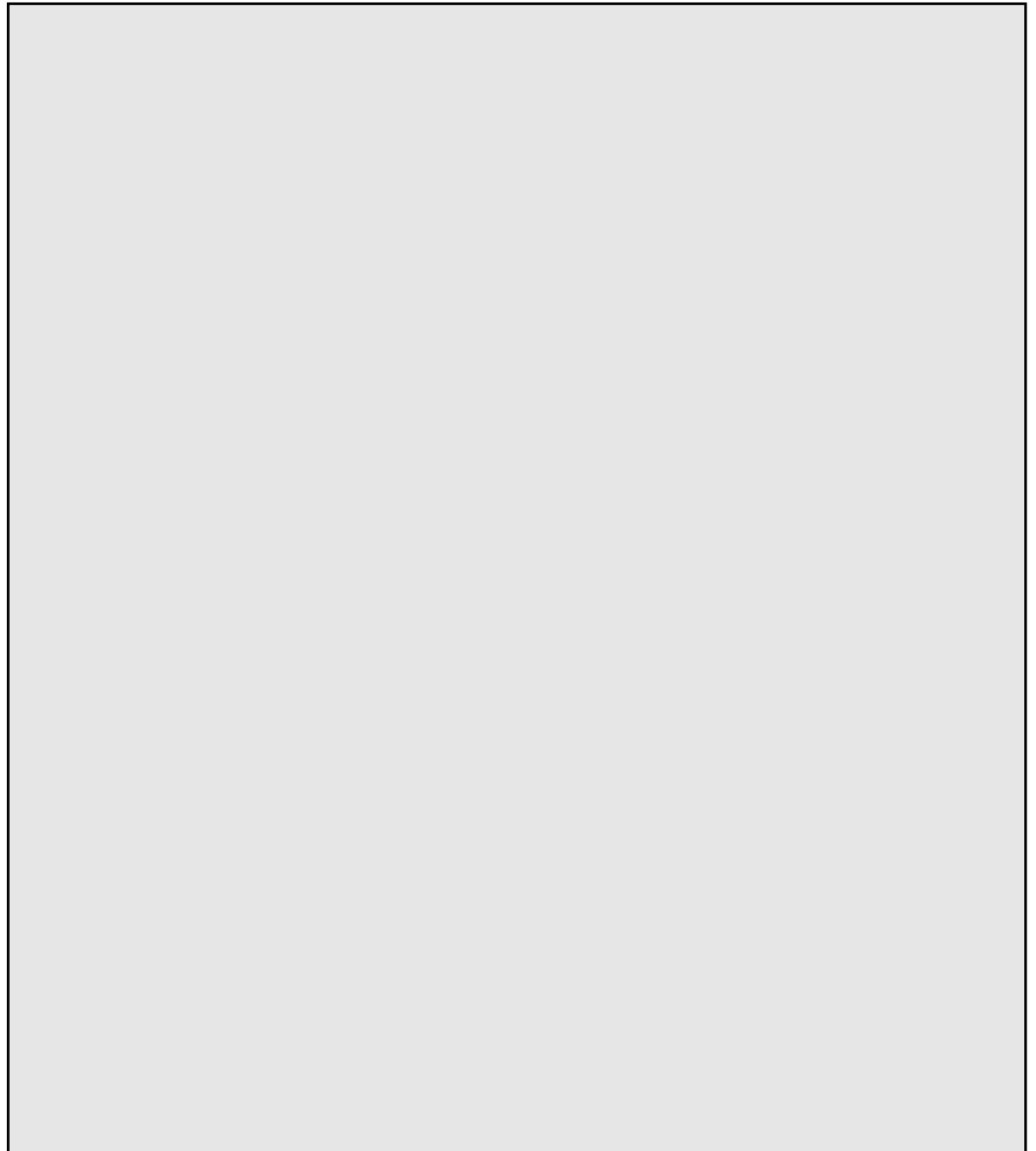


**United States
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Agriculture**

Rural Business–
Cooperative
Service

RBS Research
Report 177

The Impact of New Generation Cooperatives on Their Communities



Foreword

Development of rural communities has benefited greatly from the resurgence of interest in the cooperative form of business. Well-planned business development is often the throttle for vibrant community development. As user-owned organizations, cooperatives have been used as a model for individual self-help and empowerment that strengthens bonds leading to greater community awareness and involvement. They have been created in response to the felt needs of agricultural producers and other rural residents faced with rapidly changing forces that affect their livelihoods and well-being. Cooperatives not only provide access to markets not otherwise reached, but also provide member-owners with an opportunity to improve incomes and services. The success of these voluntarily owned and controlled businesses helps build needed infrastructure that increases community vitality and ultimately benefits all members in the community.

The Rural Business-Cooperative Service mission is to help educate and bring cooperative success stories to the attention of wider audiences. This report by a consortium of Midwest university researchers documents the experiences of five organizations and the impact their organizational initiative is having on their respective communities. Coordinating this effort has been David Trechter, University of Wisconsin-River Falls and Robert King, University of Minnesota. Contributors, in addition to Trechter and King, include Robert Cropp and Anne Reynolds, University of Wisconsin Center for Cooperatives; Kimberly Zeuli, University of Kentucky; Roger Ginder, Iowa State University; Evert Van der Sluis, South Dakota State University; Michael Cook, Deanne Hackman and Kristi Livingston, University of Missouri-Columbia; Gary Goreham and Frayne Olson, North Dakota State University; Beth Honadle, University of Minnesota; and Linda Jacobson, University of Wisconsin-River Falls.

Lessons learned from these case studies provide readers with insights into the cooperative development process, with an appreciation for the accomplishments of new cooperatives, and with an assessment of how they impact rural communities. They are instructive for others contemplating new organizational initiatives or strengthening existing ones.

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Cooperatives and Communities: Impacts and Relationships

Anne Reynolds

INTRODUCTION

Cooperative activities in the Upper Midwest have flourished in the 1990s, and the area is recognized nationally for its strong and innovative cooperatives. Not only is the area home to many of the Nation's largest regional cooperatives (Land O' Lakes, Cenex Harvest States, AgriBank, and MSI) but it's also the epicenter of the "New Generation Cooperative" movement. The cooperative model is being used in this area to promote rural development in a number of innovative ways.

This report presents findings from a study of cooperative enterprises in the Upper Midwest. During the fall of 1997 and the winter of 1998, a team of researchers from Iowa, Minnesota, Missouri, North Dakota, South Dakota, and Wisconsin conducted case studies of five cooperatives and their local communities. Objectives of the study were to:

- study and summarize the experiences of cooperatives in the area,
- study and summarize the impact of cooperatives on local communities,
- assess the research, education, and technical assistance needs of cooperative members, community leaders, and individuals who support cooperative development, and
- explore the feasibility of regional collaboration among universities and other organizations in meeting these research, education, and technical assistance needs.

Why are we interested in cooperatives and their relationship to communities?—Cooperatives are businesses that belong to the people who use them and follow three fundamental principles in their operations:

- Each member has one vote in the decision-making process, regardless of financial investment.
- The business is owned by those who use it.
- Earnings are returned to members in proportion to how much they've used the cooperative.

These three principles exemplify the differences between cooperatives and investor-oriented corporations (IOFs). In IOFs, earnings are returned in proportion to investment and control of the organization is based on share ownership.

There are more than 47,000 cooperatives in the United States, and 40 percent of the people in the United States belong to some type of cooperative. Cooperatives generate more than \$120 billion in annual economic activity. They

are represented in every sector of the economy, including agriculture, health, finance, utilities, housing, and retail. In short, cooperatives are a significant economic force in the Nation.

Cooperatives have a unique relationship to their community. Because they belong to the people who use them, they are firmly grounded in the region they serve. Decisions about services and operations are made at a local level, so cooperatives have little incentive to leave their communities. Like any other businesses, cooperatives pay property taxes and contribute to local economic development.

The positive impact of cooperatives on the local economy is strengthened by the fact that net earnings are returned to members, who usually reside in the local community. Finally, the cooperative structure requires and encourages an attitude of self-help and initiative, in a community context.

"When the idea of a cooperative comes in contact with felt needs and the readiness of people to act, it takes root, grows and flourishes. The association of people and enterprise forms a symbiotic relationship of mutual support... and the business prospers," according to the International Joint Project on Cooperative Democracy.

The five cooperatives profiled in this report were chosen to capture the diversity of new cooperative activity in the Upper Midwest. Two were relatively new value-added agricultural cooperatives: Dakota Growers Pasta Cooperative of Carrington, ND, and South Dakota Soybean Processors of Volga, SD. The project team also studied Northeast Missouri Grain Processors, an emerging value-added cooperative in Macon, MO; Farmers Cooperative of Keota, IA, a re-engineered traditional local cooperative working with Farmland Industries to develop value-added enterprises; and Western Areas City and County Cooperative (WACCO), an inter-governmental service cooperative based in Fergus Falls, MN.

These case studies show how community pride is generated when people work together to build something new or participate in a growing and successful venture. They also demonstrate how cooperatives have impacts that extend beyond their membership base. For example, a successful new cooperative enterprise with direct involvement by only a small number of farmers can enhance the viability of non-participating farms by strengthening the local market for their production or by making it possible to offer products and services that would not otherwise be available.

Finally, the case studies show that cooperative businesses, like any other businesses, have important indirect impacts. New facilities enhance the local tax base, create new jobs, and strengthen local demand for retail sales and services. But they also create a need for new roads, sewer, water, and utilities, and an increase in population that may lead to congestion, higher housing prices, and stress on schools and health care services. New cooperatives may have a powerful "demonstration effect," leading to the development of other businesses.

Why Focus on the Midwest?

The Midwest is a traditional center of cooperative enterprise. It is home to many traditional and rural development cooperatives that are recognized nationally for their strength and innovation. Nine of the top 10 cooperatives, when ranked by 1997 revenues, are located in the Midwest. The list includes large agriculture cooperatives like Farmland Industries, Cenex Harvest States, Growmark, and Land O' Lakes, and grocery wholesale cooperatives like

Associated Wholesale Grocers of Kansas City. The Midwest is also home to a vital group of smaller cooperatives that represent many sectors of the economy, ranging from credit unions, rural electrics, and natural foods to housing and agriculture.

One of the major trends in agriculture is the recognition by farmers that they need to earn a greater share of the consumer food dollar by adding value to their own products. For instance, in 1997, Great Plains wheat producers received only 10 cents of each consumer dollar spent on cereal and bakery products. Nationwide, farmers got 23 cents for every consumer dollar spent on food in 1997, compared with 37 cents in 1980. Farmer-owned cooperatives that engage in value-added processing, production, and marketing are an important strategy for increasing the farmers' share of the consumer's food expenditures.

Since the late 1980s, Midwest farmers have created more than 50 new cooperatives. The region is the center of the "new generation cooperative" (NGC) movement, which focuses on value-added processing. These innovative cooperatives are distinguished by three fundamental characteristics: members purchase delivery rights (also known as delivery shares) that require them to supply a fixed quantity of an agricultural product, membership is limited, and the value of delivery rights fluctuates in response to market forces.

Members finance a value-added processing plant through purchase of delivery shares, and, if the cooperative is profitable, they receive payment for their commodity and earnings from plant operations. Earnings are based on members' use of the cooperative, which is reflected in the number of delivery shares owned. Delivery shares can be sold to other farmers with board approval, and their value can change over time.

For instance, the first delivery shares sold by American Crystal Sugar (a sugar beet processing cooperative at Moorhead, MN) were valued at \$105/acre in 1972. In 1995, the same shares were worth \$2,500/acre. American Crystal Sugar is among the first cooperatives to use this model, and its success has influenced many communities' positive attitudes toward new generation cooperatives.

In addition to the NGC phenomenon, the cooperative model is being used in the Midwest to promote rural development in a number of innovative ways. For example, the Western Areas Cities and Counties Cooperative (WACCO) in northwestern Minnesota is a successful example of the way inter-governmental collaboration can lead to more savings for taxpayers and better services from local government.

Significance of Report—This report is geared toward two primary audiences. First, it will be valuable for those involved in the establishment of a cooperative enterprise—potential members, local government officials, residents of the local community. The case studies offer an opportunity for these individuals to learn from the experiences of others. The second audience is those working in the field of community development, including Extension agents, economic development professionals, educators, researchers, and staff at financial institutions.

Findings from this research can help individuals in this group to better understand the value of cooperatives and improve the services they provide to cooperatives and their local communities. For both groups, the case studies identify:

- the pros and cons of using the cooperative structure as an economic development tool,
- how community developers and others can assist effectively at various stages in the life cycle of cooperatives,
- the impacts of value-added cooperatives in communities, and
- critical factors for success or failure in cooperative development.

Chapter 2 reviews previous studies on cooperatives and their linkages to local communities and develops questions and propositions that are the focus of the case studies. Chapter 3 explains the rationale for using case studies to investigate relationships between cooperatives and communities and describes the case study protocol used in this research. The actual case studies are presented in Chapters 4 through 8.

Although the cooperatives are all in the Midwest, the context of each community varies and each cooperative has a unique story of challenges and successes in its development. In each case, the cooperative has had a significant effect on the community. Chapter 9 summarizes similarities and differences across the case studies, and discusses the implications of this research for cooperatives and economic development.

Reference:

The International Joint Project on Co-operative Democracy, *Making Membership Meaningful: Participatory Democracy in Co-operatives*, Centre for the Study of Co-operatives, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, 1995.

Cooperatives and Communities: Findings, Previous Research, Issues for Further Study

Kimberly A. Zeuli

In 1989, the director of a national rural development task force organized by the National Cooperative Business Association (NCBA) predicted that the need for a rural economic resurgence would lead to a new wave of cooperatives during the 1990s. In his book, *Make No Small Plans: A Cooperative Revival for Rural America*, Lee Egerstrom argues that the need for a rural economic resurgence requires a new wave of cooperative development.

During the 1990s, more than 50 new cooperatives were established in the Upper Midwest alone, most in rural communities. The primary reason behind this surge is the potential of cooperatives to foster economic growth at the individual farm, community, and regional levels.

It can be argued that the structure and objectives of cooperatives compel them to relate to communities differently than other organizational structures (Fulton and Ketilson). By virtue of being locally owned and controlled, with benefits distributed based on use, cooperatives are considered by some to be an ideal mechanism for rural community development.

Cooperatives are oriented to solving local problems by organizing local people into stable organizations...and [they] have an explicit mission to keep funding, distribution of benefits, and responsibility and accountability in local users' hands (Stafford). It is well accepted that cooperatives are valuable self-help organizations, owned and controlled by their member-users. They also have value as a tool for rural economic development. They aggregate people, resources, and capital into economic units that overcome the historic barriers to development (Ziewacz).

Agricultural cooperatives, in particular, are targeted as a tool for economic development because their future is tied to that of their rural communities. Cooperatives have both a vested business and personal interest in rural America because it's home for them and their families (Allen).

The significance of cooperatives to rural communities and rural development efforts, however, goes beyond economic impacts. Cooperatives often have broad social, demographic, and environmental impacts on the communities in which they are located. This chapter reviews previous studies on cooperatives, focusing on the motives members have in establishing cooperatives and on economic, social, and environmental impacts cooperatives have on their local communities.

Why Establish a Cooperative?

A cooperative business is owned and governed by its users. Individuals establish cooperatives because this form of business organization helps its members accomplish tasks collectively that they could not accomplish individually. This section reviews three important motives for forming cooperatives: challenging market power, providing unique products and services that would not otherwise be available, and enhancing income through reduced costs or higher revenues.

Challenging Market Power—In many rural communities and regions a single firm can adequately meet the demand for goods or services. Likewise, a single firm may efficiently process and market the entire quantity of a product produced in a region. Although this firm may find it profitable to operate, high fixed costs and other barriers to entry may make it unprofitable and inefficient for other firms. As a monopolist, the single firm can charge higher prices for the products and services it sells. Unlike other organizations, a cooperative may be able to justify entering this type of market to challenge the market power of the monopolist. Because a cooperative's customers are also its owners, they may choose to lower prices to the point where the firm just breaks even.

Alternatively, they may choose to continue charging the higher monopolist price and distribute profits back to members in the form of patronage refunds. In either case, a cooperative can justify entering this type of market because of the subsequent increase in the welfare of its members (Enke and Fulton).

Cooperatives enable farmers to pool their resources. This is especially important for small farms. Through farm supply and marketing cooperatives, farmers buy production supplies and services and market their products collectively. By collectively challenging investor-oriented firms with their market power, members of cooperatives often pay lower prices for supplies and receive higher prices for products they sell.

Members may also use cooperatives to gain access to sellers and buyers who only deal with high-volume transactions. Torgerson, Reynolds, and Gray concluded that "Cooperatives represent one of the few options that farm entrepreneurs have for surviving in a more concentrated and integrated global agricultural environment."

Other industries have followed the example set by farmers. A group of sheet metal fabricating shops in the South saved \$1 million in insurance costs by using a cooperative network (Ziewacz). Tim Size noted how a dispersed set of rural hospitals shares areas of expertise and lowers administrative costs through their cooperative.

Providing Unique Products and Services—In some communities, cooperatives are the only type of organization willing to provide a service. Again, this is related to the fact that cooperatives are owned by those who use the products and services they offer. The member-owners may create or support a cooperative that does not earn a competitive rate of return if the total benefits from having the products and services it offers available locally outweigh the losses of operation (Fulton and Ketilson).

Non-cooperative organizations that base their decision to provide products and services on competitive rates of return would not be willing to operate in such a market. The owners of these organizations, assumed to be investors who are not also customers, would not receive any monetary reward for doing so.

Cooperatives that purchase processing plants formerly owned by IOFs exemplify this. An IOF may close a plant for a variety of reasons, including, lack of profits. When this eliminates an important local market, farmers may band together to purchase and operate the plant.

In 1973, The Red River Valley Sugarbeet Growers Association purchased the publicly held American Crystal Sugar Company, creating a farmer-owned cooperative bearing the same name (Jacobs). American Crystal had restricted its sugarbeet processing activities and farmers feared it would close one or more of its plants in the Red River Valley. More recently, turkey farmers in Iowa formed the Iowa Turkey Growers Cooperative, which then purchased a turkey processing plant and feed mill from Oscar Mayer (Perkins). Oscar Mayer planned to close the plant if it could not find a buyer.

Non-agricultural cooperatives also fill rural and urban community product and service needs that would otherwise be unmet (Bhuyan, Leistriz and Cobia; Nadeau and Thompson). They provide credit, health care, insurance, education, childcare, and housing, among other services. Cooperatives also play an important role in providing electricity and telecommunication services to residents of sparsely populated rural areas.

Studies suggest that the cooperative model can facilitate establishment of other service-oriented businesses. In a survey of 162 non-agricultural cooperatives conducted by Bhuyan, Leistriz, and Cobia, 44 percent said they could not have opened their business had it not been organized as a cooperative. Based on their survey of cooperatives and 11 communities in Saskatchewan in 1991, Fulton and Ketilson found that cooperatives and credit unions provided goods and services that other businesses were not willing or able to provide.

Agricultural cooperatives are also beginning to provide more non-agricultural services in the communities in which they operate. "In many rural communities, the local agricultural cooperative has developed into somewhat of a business center, providing services to members and other residents that go beyond traditional agricultural supply and marketing functions. (Stafford)." Examples of agricultural cooperatives providing such services include convenience stores, car washes, hair salons, restaurants, and auto part stores. This type of expansion often results when the local owners of the businesses leave and no one else is willing to take over. It may also be a consequence of a cooperative's search for expansion opportunities that provide members a higher return on their investment.

Income Enhancement—A primary motivation for farmers to form and participate in agricultural cooperatives is to increase their income (Ingalsbe; Rhodes; Schrader). Farmers may save on production supply costs and receive higher prices for their products by acting cooperatively. Similarly, many consumers join credit unions to save on the cost of financial services. By virtue of its structure, a cooperative also allows members to share in the profits of the firm.

Therefore, if the cooperative operates efficiently, members realize higher economic returns than if they patronized an IOF (Rhodes). The cooperative's profits are divided between patronage refunds and retained equity. A patronage refund is a percentage of the cooperative's profits allocated to a patron in proportion to the value or quantity of business the patron does with the cooperative (Rathbone and Wissman)."

Through processing and other value-added activities, cooperatives attempt to capture more profits for their farmer/members. Recent articles

report several cooperatives' success in providing substantial economic returns for farmers. "Thousands of farmers have grown quietly rich on their cooperative investments," notes Alster.

Farmers' stock in American Crystal Sugar appreciated 20-fold from 1972 to 1994. Their stock in Minnesota Corn Processors appreciated 10-fold from 1982 to 1994. Like other new generation cooperatives, Dakota Growers, which is profiled in one of the case studies that follow, is credited with putting more money in the pockets of growers. USDA estimates farmer-owned cooperatives added \$9.6 billion in net value to their members' products, farm supplies and services in 1995 (Kraenzle and Cummins).

Economic, Social, and Environmental Impacts **Economic Impacts**—Some of the economic impacts a cooperative has on a community are related to its operations rather than its structure. This is especially true in the case of agricultural cooperatives involved in food processing or other value-added activities. Local processing of agricultural commodities is considered an important rural community development strategy in and of itself, regardless of how the processing firm is structured (Henderson and McNamara; Leistriz, 1992; Leistriz, Leitch, and Bangsund).

Food processing plants are promoted as vehicles for economic growth, offering new job opportunities and increases in rural incomes (Henderson and McNamara; Leistriz, 1992). If agricultural commodities currently shipped out of the region could be processed at facilities located within the area, additional jobs and income and an expanded tax base could result within the State and region (Leistriz, Leitch, and Bangsund). The intent of this strategy is to capture more of the value added between the farm-gate and the retail shelf and retain these dollars in the local economy.

Construction and operating expenses, including the salaries and wages paid to employees, are the direct economic impacts associated with agribusiness firms (and most other types of firms). Agribusinesses may also have a positive effect on regional product prices by increasing regional demand. Indirect economic impacts associated with agribusiness operations include increased employment and business activity in other sectors, most notably retail and services, as individuals spend or invest their increased personal income (Leistriz 1997). Opening a new value-added processing plant will, however, make a net addition to the local economy only if it actually increases local processing opportunities, rather than replacing an existing facility.

The contributions of agricultural cooperatives to the local, regional, and national economies are well documented. For example, the U.S. Department of Agriculture's annual Farmer Cooperative Statistics shows that agricultural cooperatives have \$46.5 billion of combined assets invested in rural America and a total annual net business volume of \$105 billion (Kraenzle et al.).

Cooperative agribusiness firms may have slightly different economic impacts than their non-cooperative counterparts. In his analysis of one processing cooperative, Leistriz found that, because of the distribution of profits to farmers, the cooperative recorded substantially higher regional expenditures per direct job than other typical rural manufacturing plants. The results of Zeuli's comparison of variously structured value-added agricultural firms show some evidence that cooperatives may also operate larger plants and therefore, employ more people.

Regardless of structure, a new agribusiness enterprise will also have fiscal impacts. Through their corporate profits, patronage payments, and employee wages, agribusiness firms make significant contributions to national, State, and

community tax bases. Because of the tax treatment afforded much of its income, a cooperative will pay lower corporate taxes than its non-cooperative counterpart. The income of cooperatives is taxed at the same rate as a corporation, but the cooperative can deduct patronage refunds from its income before it is taxed if it complies with certain rules (Frederick and Reilly). Farmers are taxed on the patronage refunds as part of their income. The proportion of the refund paid as cash that exceeds taxes due, as well as the local tax contribution, provide an economic stimulus to the local economy.

New agribusiness firms, again regardless of structure, can have a negative short-term effect on local government revenues. Often, communities offer tax incentives to attract new firms. A community may also offer to pay for some or all of any necessary infrastructure improvements. Also, if the new enterprise results in population growth, the community may need to expand facilities and operating expenses for public services such as schools, hospitals, and utilities.

However, State and Federal funding may help offset these costs. The community may be able to shift some costs for infrastructure improvements to the county or the State, and State and national block grant payments to local governments may increase with changes in population and school enrollments. Finally, because adequate infrastructure is essential in attracting other businesses, community investments that do not generate a positive net return immediately may pay off in the longer run.

Finally, some cooperatives, especially those providing rural electric services, are actively involved in organizing community and regional development projects. For these cooperatives, community growth translates directly into business growth. For instance, the North Dakota Association of Rural Electric Cooperatives spearheaded an economic development plan for the State in the late 1980s. The focus of this program was rural development through cooperative development. The association has provided technical assistance to many of the new cooperatives in North Dakota (Campbell).

The Federation of Southern Cooperatives directs a program aimed at assisting low-income, minority farmers to gain improved access to credit and technology in 11 southern States (Ziewacz). Dixie Electric Cooperative in Bullock County, AL, helped the county expand a small community's water system. The project required \$4 million, which they jointly received through 10 separate and successful loan applications.

Community Cohesion—Cooperatives may or may not increase the social cohesion of a community. They often provide vital local meeting places where people have a chance to interact (Wilkinson). Fulton and Ketilson found that in small communities the cooperative store was more than just a place of business; it was the social and economic hub of the community.

In larger communities, they found that the community activities of cooperatives were more similar to their corporate counterparts: donations to local clubs, scholarships, etc. Unfortunately, the establishment or location of a cooperative may also divide some communities among supporters and non-supporters. This tends to be correlated with factors such as the number of jobs it will create, the pollution potential of the cooperative firm, and/or the financial burdens it places on the community.

One issue that arises with NGCs is the impact their defined membership policies may have on community cohesion. Traditional agricultural cooperatives are easy to join and difficult to leave. Typically, one joins by simply paying

a small membership fee and patronizing the cooperative, and one remains a member until retained equity is returned (often when the member reaches a specified age or dies).

In contrast, NGCs are more difficult to join, but often easier to leave. They generally require a substantial up-front investment in stock that is linked to annual delivery rights and responsibilities. Subject to board approval, though, that stock can be sold to another farmer at a market-determined value. When an NGC is successful, this membership policy can lead to divisions between community members who were able to join and those who were not. On the other hand, tradable shares make it possible for an exiting member to recover the current value of the investment in the cooperative. Difficulties in removing allocated equity have been a source of conflict among members of traditional cooperatives.

Demographic Shifts—The addition of any firm to a community may cause an increase in the local population by attracting new workers and their families (Leistritz, 1997). If the community has low unemployment, non-local workers will fill a higher percentage of the jobs. This increased population may stress the housing market, public services and facilities (health care, schools, police, social services, etc.), and utilities. It can also lead to tensions along ethnic, racial, or religious lines, because workers may be recent immigrants with different ethnic backgrounds and customs.

Ironically, the more successful a cooperative or other business is in a small town, the higher the probability that some negative externalities may surface, such as a labor shortage, a housing shortage, inflated housing values, or increased crime rates. Citizens may also feel that their community has lost its small town atmosphere. On the other hand, population increase (or stabilization) may justify the expansion or at least the maintenance of rural schools and other facilities.

Developing Human Capital—Cooperatives can also contribute to their communities through human capital development. The organization and operation of a cooperative provides leadership development in rural communities, a step some consider necessary for other local development efforts. One cooperative leader indicated progress in rural development can't and won't happen unless the people involved want it to happen and are in a position to take the lead to make it happen (Allen).

Membership on a cooperative board can be an especially valuable basis for leadership development. Many individuals who have served on boards say they value the experience because it forces them to develop skills in business management, communications, and group problem solving and often provides opportunities for formal training in these areas.

Skills gained through service on a cooperative board transfer easily as individuals move into other leadership positions in their community, school district, or church. Educational opportunities also extend to members who do not serve on the board. A duty to educate members has been a traditional cooperative principle (Barton). Torgerson describes a North Carolina craft cooperative that trains its members not only in craft skills, but also in basic business and financial practices, self-assertion, and self-esteem. "The self-improvement generated through skill development provided by the cooperative has made these individuals productive members of society with a mission," he said.

Environmental Impacts—Any type of processing plant will have some impact on the environment and local infrastructure. There are pollution possibilities as well as an increased use of local resources such as water, electricity,

and sewage disposal. Additionally, the transportation used by the plant may increase traffic congestion and wear and tear on local roads. In addition, some cooperative processing plants may affect farm production patterns. For example, to reduce transportation costs, a plant may encourage nearby farmers to produce more of the crop it processes. This may concentrate production in a small area, reducing crop diversification on the farms of members and potentially exposing them to greater production risk.

However, cooperatives may be more able than other agribusinesses to contribute to an environmentally sustainable agriculture because farmers own them. Indeed, many cooperatives have instituted state-of-the-art environmental stewardship programs. Loosely defined, environmental stewardship includes the use of precision agriculture, best management practices, wildlife habitat improvement, and other methods to protect natural resources. Ocean Spray, Cenex, Land O'Lakes, Growmark, Farmland, Tri Valley Growers, and American Crystal Sugar are just some of the cooperatives using innovative environmental programs (Boyle).

Key Questions for Further Study

The important role of cooperatives in rural economic development is clearly established. However, the processes by which cooperatives—especially new forms of cooperative enterprise—are formed, interrelate with local communities, and contribute to development are not well understood and documented.

The five case studies of recently formed cooperative organizations presented in Chapters 4 through 8 provide insights into these processes and focus on the following questions:

1. What impacts—economic, social, and environmental—do new cooperatives have on their communities? How are these impacts shaped by the characteristics of the cooperative and its community?
2. What internal and external factors are associated with the successful formation and continued operation of a cooperative enterprise?
3. What are the critical challenges facing cooperative members and communities in the establishment of a new cooperative enterprise? What forms of technical assistance, educational programming, and research are needed to most effectively support the establishment process?

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Case Study Design and Research Protocol

David Trechter and Robert P. King

This project was conducted to provide insights into the interactions between cooperative enterprises and their communities, to clarify the processes by which cooperative enterprises are established and succeed, and to identify the needs cooperative members and communities have for technical assistance, educational programming, and research. The project team used a case study approach. As Robert Yin noted in his case study *Research: Design and Methods*, these studies are an appropriate research technique when:

- the investigator is principally interested in “how” and “why” types of questions,
- the investigation is not being done in a laboratory setting in which the behavior of those being studied can be controlled or manipulated directly and systematically, and
- the focus of the study is on contemporary events.

With our interests in how and why cooperatives contribute to the economic development process, this approach seemed ideally suited for our research objectives. This chapter describes the overall design for the case studies and outline the research protocol used to guide data collection and analysis. Forms and worksheets used to support each case study are reproduced in the appendix to this chapter.

Case Study Design—The central question underlying this study is how cooperatives relate to their communities to foster rural development. The case studies were not designed to test formal propositions but were predicated on three assumptions: (1) cooperatives tend to go through similar stages of development, (2) both internal and external factors are critical to the success of the cooperative’s development, and (3) there are consistent patterns of technical assistance, education, and research needs.

Regarding stages in cooperative development, the study team hypothesized that the leadership needs of a cooperative change as it passes through the various stages of development as do the educational, training and technical assistance needs. The research team felt that it was important to understand these stages of development in order to provide relevant technical assistance, educational programming, and research to cooperatives and their communities.

Cooperatives succeed or fail for a variety of internal and external reasons. The case studies were designed to identify critical factors for success that seemed to be common across the variety of cooperatives examined. The team was especially interested in the question of when a cooperative is and is not an appropriate institutional form for a business enterprise. Given the time required to create a cooperative and the energy that must be expended by its organizers, understanding the conditions associated with the successful formation and operation of a cooperative is important. These conditions may be related to the nature of the business enterprise, but there may also be community characteristics that foster successful cooperative development.

Finally, based on years of experience in working with cooperatives and rural communities, the team expected to find consistent patterns in technical assistance, education, and research needs and was able to hypothesize what many of those needs would be. Technical assistance needs expected to be important for cooperative development included: strategic planning, legal assistance, market research, risk assessment, business planning, engineering and technology assistance, and financial management. Important training topics were expected to include: leadership development, cooperative basics, public finance, and community economics. The team felt that the following research topics would have high priority: case histories of successful and unsuccessful cooperatives, identifying when to develop a cooperative versus some other organizational form, identifying critical success factors, identifying critical community economic issues associated with cooperative development, assessing the economic returns from cooperatives, and developing guidelines for creating cooperatives.

To examine the interaction of cooperatives and their communities from multiple perspectives, the team adopted an embedded, multiple case design. Yin (pp. 41-44) notes that in an embedded case study, there is more than one unit of analysis. This project used two primary units of analysis—the cooperative and its community. Within each, subgroups were the focus for data collection and analysis. For cooperatives, these included members, directors, and members of the management team. For communities, these included local government officials, business leaders, interested residents, and individuals who chose not to or were not able to be members of the cooperative.

The five cooperatives and communities studied were chosen to represent a broad spectrum of organizational forms and functions for cooperatives in rural America. Findings were expected to differ across cases. These differences were expected to strengthen our understanding of how and why cooperatives are an effective tool for rural development and of what resource providers can do to foster cooperative development. The stage of development of the cooperative was, in particular, expected to be a critical factor determining needed technical assistance, educational, and research priorities.

Project team members identified cooperatives/communities considered to be good candidates for a case study. A project team member then contacted the cooperative manager and/or board chair to determine their willingness to participate in the study. Three of those studied are “new generation cooperatives”; one is a traditional cooperative that has changed its relationship with members in critical ways, and the last is an application of the cooperative model to deliver governmental services in rural areas.

Research Protocol

To ensure consistency across case studies, the project team developed a formal protocol that included: guidelines for a preliminary site visit, plans for secondary and primary data collection (including standard questions for personal interviews, and worksheets and exercises to be used in focus group sessions), and an outline for each case study. Samples of these materials are included in the appendix at the end of this chapter.

Preliminary Site Visit—The preliminary site visit was an important part of the protocol. The purpose of this visit—usually made by the project team member who made initial contact with the cooperative to be studied—was to confirm the appropriateness of the site, to meet with local people who would

help make arrangements for the case study team visit, to develop contact lists for interviews and focus group sessions, and to set a date for the case study interviews. During the initial contact, the “Site Visit Worksheet” in the appendix served as a guide for the visit.

Secondary Data Collection—Data were collected from a variety of sources. Secondary data from the Census of Population and Housing, Bureau of Economic Analysis, Census of Agriculture and other State and Federal sources were used to develop a local community profile. This profile included current and historical information on the economic structure of the area (per capita income, unemployment rates, poverty levels, structure of business, and agricultural statistics), key socio-demographic indicators (size and composition of population, age structure, etc.) and other local information about the study cooperative (newspaper articles, annual reports, etc.). A community profile was used by team members preparing for interviews and focus group sessions.

Primary Data Collection—A series of focus groups and individual interviews were conducted in the study. Focus groups were the tool used for primary data collection because they are an efficient, effective method for gathering unstructured information and subjective perceptions. Krueger (p. 18) defines a focus group as:

... a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment. It is conducted with approximately seven to ten people by a skilled interviewer. The discussion is relaxed, comfortable, and often enjoyable for participants as they share their ideas and perceptions. Group members influence each other by responding to ideas and comments in the discussion.

The focus groups provided an ideal setting for project team members to listen to members of the cooperative and its community. Whenever possible separate groups were used for: the cooperative board of directors; citizens, local government officials, and local business leaders; local government officials; members of the cooperative; and people who chose not to join the cooperative. The basic data collection structure and types of information collected were similar across groups (see the facilitator’s script and data collection worksheets for the citizen-local government-local business leader focus group in the appendix to illustrate the materials used in all the focus groups).

The focus groups opened with an explanation of the objectives for the session. Each participant received an invitation to the session, which described the project and the purpose of the focus group. This introductory segment restated that information and set the informal tone for the session. The next thirty minutes was used to discuss the cooperative’s formation and the role of the participants’ organizations. Responses were recorded on a flip chart and served as a reference in later discussion. These flip chart pages were saved to permit comparisons of historical perceptions across focus groups.

The second segment focused on the participants’ perceptions of technical assistance, education, and research needs during the development process (Appendix Form No. 1). During the third segment, participants identified positive and negative impacts of the cooperative on their community. They first individually identified key impacts then contributed items to a collective list that was recorded on a flip chart. This encouraged reticent participants to con-

tribute their ideas. Items on the flip charts considered to be most important were identified. As the session ended participants were invited to make additional comments.

The circumstances of each case study and the number and type of focus groups varied. For example, the cooperative of local governments profiled in Chapter 8 is not widely known to local citizens and businesses. As a result, the member/non-member focus groups and the citizen/government/business focus groups collapsed into member and non-member focus groups. In no case were all of the focus groups identified above completed.

In addition to the focus groups, individual interviews were conducted with the manager of the cooperatives and, when possible, with the “cooperative champion.” This was the person (or persons) who took the key leadership responsibilities during the start-up phase of the cooperative. The interviews with the manager and cooperative champion, like the focus groups, sought information on the cooperative’s impact on members and the community and on priorities for research, education and technical assistance. In addition, these interviews sought information about the formation of the cooperative (key events, information needed/used, use of outside assistance), the lessons they have learned that should be shared with others forming cooperatives, and the challenges and opportunities they see for their cooperative over the coming years.

Outline for the Case Study Report—The project team developed a standard outline for the case study reports to ensure consistency and to facilitate comparisons across cases. Each case study begins with a brief introduction that explains the rationale for choosing the cooperative and its community. A socioeconomic profile of the region follows that includes a map and reports basic trends in population, employment, sources of earnings, etc. The third section of each case study provides background information on the cooperative enterprise, including a description of size and scope of operations and a brief account of the cooperative’s history. Sections four and five of each case study report findings from focus groups and interviews on the impacts of the cooperative on the community and on perceived needs for technical assistance, educational programs, and research. Finally, each case study concludes with discussions of key lessons learned and opportunities and challenges facing the cooperative and the community.

Implementing the Protocol

The case study protocol, which was developed by David Trechter, Robert P. King and Kim Zeuli, was pretested with the South Dakota Soybean Processors at Volga, SD. Team members were Evert Van der Sluis of South Dakota State University (SDSU), Gary Goreham of North Dakota State University (NDSU), and Kim Zeuli, then at the University of Minnesota (UMn). Although only four case studies were originally planned, the results showed enough interest to warrant additional data collection and preparation of a full case study report.

The study of Farmers Cooperative Association of Keota, IA, was conducted by Robert Cropp of the University of Wisconsin-Madison (UWM), Roger Ginder at Iowa State University (ISU), Evert Van der Sluis (NDSU), and Kim Zeuli (UMn).

The Western Areas Cities and Counties Cooperative (WACCO) case study was conducted at Fergus Fall, MN, by David Trechter and Linda Jacobson at the University of Wisconsin-River Falls (UWRF), Anne Reynolds (UWM), Gary Goreham and Frayne Olson (NDSU), and Beth Honadle (UMn).

The Dakota Growers Pasta Company case study was conducted at Carrington, ND, by Kim Zeuli and Robert King (UMn), Gary Goreham (NDSU), and Evert Van der Sluis (SDSU).

The Northeast Missouri Grain Processors case study was conducted at Macon, MO, by Kristi Livingston and Michael Cook of the University of Missouri (UMo), Robert King (UMn), Anne Reynolds (UWM), and David Trechter (UWRF).

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Site Visit Worksheet

Contact county extension agent or other local contact, cooperative manager, and possibly cooperative board chairperson and set date for advance visit

Send county agent, manager and board chair the follow-up letter and one-page project summary

Determine possible dates for case study visit from team members

During advance site visit:

Date Completed

Meet with county agent and/or other local contact to answer any questions determine possible dates for case study visit, and get names, addresses, and phone numbers for the following discussion groups:

Local citizens (15-30)

Local government/businesses (15 - 30). Included in this group should be the following: city/county administrator, county commissioners, city council member, assessor, police, utilities person, roads person, social services, cooperative extension, regional planner, community economic development officer, newspaper editor, banker, school official (superintendent, principal, board member), hospital administrator, Realtor, Chamber of Commerce, construction worker

Identify key people for individual interviews (manager, board chair, co-op champion, government leader)

Determine what gratuity policy will be (specifically, who should not be given a monetary gratuity and what is an appropriate alternative to \$20)

Meet with manager & board chair to answer any questions, determine possible dates for case study visit, set interview times with manager, board chair and co-op champion, collect annual reports (5 years) and get names, addresses and phone numbers for the following discussion groups:

Board of directors, 10 - 20

Co-op members (10 - 20 names), and, perhaps,

Non-members (15 - 30 names)

Collect local information (phone books, newspaper articles)

Arrange 2 locations for discussion groups. Visit facilities (check for overhead projector, coffee facilities, refrigerator, easels for flip charts)

Arrange for lodging for case study team (motel name, phone number, rates)

Write Press Release (as needed)

Set Case Study Site Visit Date

Notify Team Members of Case Study Date

Items Needed for Case Study	Acquired
Flip Flip Charts (3-4)	<hr/>
Easels	<hr/>
Markers	<hr/>
Tape recorders (3-4)	<hr/>
Audio tapes (3-4 per focus group)	<hr/>
Digital camera	<hr/>
Film camera, film and flash	<hr/>
Batteries (tape recorders, camera flash units)	<hr/>
Masking or Scotch Tape	<hr/>
Overhead projectors (2-3) (with spare bulbs)	<hr/>
Extension Cord(s)	<hr/>
Background Information Packet	<hr/>
Facilitator's Script, Including:	<hr/>
Forms for cooperative impact	<hr/>
Forms for technical assistance, education, and research needs	<hr/>
Consent forms (signed by local PI)	<hr/>
Overheads for Introductory materials	<hr/>
Colored Adhesive Dots (numbered 3, 2, 1)	<hr/>
Name tents	<hr/>
Pencils	<hr/>
Paper clips	<hr/>
Gratuuity, envelope, thank-you card and receipts	<hr/>
Sodas	<hr/>
Bottled Water	<hr/>
Coffee	<hr/>
Sugar	<hr/>
Cream	<hr/>
Rolls	<hr/>
Cookies	<hr/>
Cups	<hr/>
Napkins	<hr/>
Paper plates	<hr/>
Ice and cooler(s)	<hr/>
Notice sheets to tape on doors of discussion group	

Facilitator's Script for the Local Government Group

(10 minutes)

Welcome to this discussion session on _____ cooperative. My name is _____, I am from the University of _____. I am being assisted today by _____ from the University of _____. We are here as part of a Fund for Rural America project funded by U.S.D.A.

This research project is designed to: ***(Use the overheads provided to you to summarize the project and what we hope to gain from this discussion).***

You have been invited to this discussion group because you are a key person in local government and we feel you can give us valuable insights into the development of this cooperative. Could we go around the room and introduce ourselves. ***(handout tent cards with names)***. If you are unwilling to sign the consent form, you may leave the discussion group now.

I am going to handout 2 copies of a consent form and ask you to read the form now. If you are willing to participate in this discussion group please sign both forms, return one copy to me and retain the other for you files. I want to assure you that any comments or observations you make today will be confidential. (Hand out and collect consent forms)

The groundrules for the discussion today are as follows:

- try to be succinct so that everyone has a chance to say what they want to say
- try to avoid side conversations as they are distracting to the person speaking and to us
- be respectful of all participants
- try to stay focused on the questions at hand since time is limited

(30 minutes)

1. Our first task is to discuss the formation of the cooperative. We want to get a better idea of how your local government was involved in the development of _____ cooperative. Beginning with the moment you first heard about the cooperative, from the perspective of local government:
 - what was the first key event?
 - who was involved?
 - what was the issue and outcome?
 - what information helped you make your decision?
 - what sort of outside assistance, if any, was wanted or needed at that point?

(Several flip charts should be prepared in advance with printed headings for each of these questions. You will have received a packet of printed headings that you can tape to your flip charts)

(15 minutes)

2. If established, the FRA Center for Cooperative Enterprise will offer technical assistance, provide educational programs, and do research. The following form lists technical assistance offerings, educational programming, and research outputs that might be provided by this Center. (pass out form #1). Please take a few minutes to look at this list and add to it as you see fit.

Rate each of these items as being very important, being important, being neutral, being unimportant, and being very unimportant. The final column asks you to indicate if the item was important in the past, is currently important, will be important in the future, or if it is something of ongoing importance.

If you think an item is not applicable or if you don't know if it is, just mark the "Not Applicable" column on the form.

There is also space on the form for you to write any comments you may have about a particular item.

When you have completed the form, _____ (the assistant) will collect them. You need not put your name on the form.

(30 minutes)

3. Please spend a few minutes thinking about how _____ cooperative has affected your community. Here is a form to help guide your thinking (**pass out form #2**). We want you to indicate the impacts, both good and bad, that the cooperative has had on your community and on local government. Please spend about 5 minutes just writing out what you think the pros and cons of the cooperative have been on your community and on local government.

I am going to go around the table now and ask each of you to tell us one thing that you have written down. I will continue going around the table until everyone has exhausted their lists of impacts. If you have something that someone else has previously mentioned, you don't need to repeat it. (**Assistant will record responses on flip chart - one page for impact on towns and one for impact on local government**)

We are now going to pass out two sets of colored dots to you. You will note the dots are numbered 1, 2, or 3. The red dots will be used for the cooperative's impact on its members and the blue dots for the impact on non-members. I want you to look at the lists and identify the three cooperative impacts (either positive or negative) that you think are most important. Go up to the flip charts and put the dot with 3 written on it next to the most important impact, the dot with 2 next to the second most important impact, and the dot with 1 next to the third most important impact. Please don't cover up anyone else's dots! Please indicate your top three impacts on the local community (with the red dots) and on local government (with the blue dots). (**Pass out the dots**)

Based on your choices, it appears that the most important impacts of the cooperative on the community are _____, _____, and _____. The most important impacts on local government are _____, _____, and _____.

(10 minutes)

4. In the time remaining, I'd like to ask if there are other issues associated with this cooperative that we have not covered and if you can identify ways that the Universities in this region can help communities such as yours in their dealings with cooperatives?

(Record comments as appropriate)

Wrapup

I would like to thank you for your time and your thoughtful comments. I know that each of you have busy schedules and we appreciate your participation in this project. I want to again assure you that no comments that you have made will be associated with you in any writeups of this discussion that we do.

What will happen next is that we will summarize all of the comments we have received today and write up a case study of this cooperative. It will be combined with the other three sites we are studying. We will be sending a copy of this write-up to your local library. In addition, we will be having a conference in February to try to synthesize the insights we have gained from all four case studies. In March we will be writing a grant to seek fund-

ing for a Center of Cooperative Enterprise. A key goal of this center will be to take the valuable lessons learned by the people involved in this cooperative and apply them in other parts of this region and in other parts of the country.

As a token of our appreciation of your participation in this discussion group, we have a small monetary gift for you. If your position precludes acceptance of this gift, please accept our thanks. If you can accept the gift, we need to get you to sign a receipt. Please see me or _____ so we can get the receipt from you.

Thanks again for your participation.

Form No. 1 —Rating Possible Fund for Rural America Programming

Rate each of these items as **very important**, **important**, **neutral**, **unimportant**, or very unimportant. The final column asks you to indicate if the item was important in the **past = P**, **is currently important = C**, **will be important in the future = F**, or **if it is something of ongoing importance = O**. If you think an item is not applicable or if you don't know if it is, just mark the "Not Applicable" column on the form. Feel free to add any comments you would like.

Technical Assistance

	Not applicable	Very Important	Important	Neutral	Un- Important	Important	P, C, F, O
1. Strategic Planning	_____	_____	_____	_____	_____	_____	_____
2. Legal Assistance	_____	_____	_____	_____	_____	_____	_____
3. Market Research	_____	_____	_____	_____	_____	_____	_____
4. Risk Assessment	_____	_____	_____	_____	_____	_____	_____
5. Business Planning	_____	_____	_____	_____	_____	_____	_____
6. Engineering and Technology	_____	_____	_____	_____	_____	_____	_____
7. Financial Management	_____	_____	_____	_____	_____	_____	_____
8	_____	_____	_____	_____	_____	_____	_____
9.	_____	_____	_____	_____	_____	_____	_____

Comments

continued

Form No. 1 —Rating Possible Fund for Rural America Programming (continued)

Rate each of these items as **very important**, **important**, **neutral**, **unimportant**, or **very unimportant**. The final column asks you to indicate if the item was important in the **past = P**, **is currently important = C**, will be important in the **future = F**, or if it is something of **ongoing importance = O**. If you think an item is not applicable or if you don't know if it is, just mark the "Not Applicable" column on the form. Feel free to add any comments you would like.

Educational Programs

	Not applicable	Very Important	Important	Neutral	Un- Important	Important	P, C, F, O
1. Leadership Training	_____	_____	_____	_____	_____	_____	_____
2. Cooperative Basics	_____	_____	_____	_____	_____	_____	_____
3. Public Finance	_____	_____	_____	_____	_____	_____	_____
4. Community Economics	_____	_____	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____	_____	_____
6.	_____	_____	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____	_____	_____
8.	_____	_____	_____	_____	_____	_____	_____
9.	_____	_____	_____	_____	_____	_____	_____

Comments

continued

Form No. 1 —Rating Possible Fund for Rural America Programming (continued)

Rate each of these items as **very important, important, neutral, unimportant, or very unimportant**. The final column asks you to indicate if the item was important in the **past = P, is currently important = C**, will be important in the **future = F**, or if it is something of **ongoing importance = O**. If you think an item is not applicable or if you don't know if it is, just mark the "Not Applicable" column on the form. Feel free to add any comments you would like.

Research Outputs

	Not applicable	Very Important	Important	Neutral	Un- Important	Important	P, C, F, O
1. Case histories of successful & unsuccessful co-ops	_____	_____	_____	_____	_____	_____	_____
2. When to use a co-op or other organizational form	_____	_____	_____	_____	_____	_____	_____
3. Critical success factors	_____	_____	_____	_____	_____	_____	_____
4. Critical community economic issues	_____	_____	_____	_____	_____	_____	_____
5. Assessing the economic returns from co-ops	_____	_____	_____	_____	_____	_____	_____
6. Guidelines for creating a co-op	_____	_____	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____	_____	_____
8 .	_____	_____	_____	_____	_____	_____	_____

Comments

Form No. 2 —Assessment of Co-op's Impact on the Community

Please assess the impact of this cooperative on the following groups within your community. Please list both the positive and negative ways in which you think your cooperative has affected each group. For example, the cooperative may have increased the income of people from one group (a positive impact) but also increased their taxes to build infrastructure needed to serve the cooperative (a negative impact). Try to consider all impacts: economic, social, political or other.

1. How has the cooperative affected its members?

Positive Impacts

Negative Impacts

2. How has the cooperative affected its non-members?

Positive Impacts

Negative Impacts

Farmers' Cooperative Association, Keota, Iowa

Robert Cropp, Roger Ginder,
Evert Van der Sluis, Kimberly A. Zeuli

Introduction

Farmers' Cooperative Association, Keota, IA, is an interesting case study for a number of reasons. First, it is an innovative program that could help to reverse the decline in the State's hog industry. Hogs have long been important agricultural enterprises for Upper Midwestern States like Iowa. In 1996, hogs were the second most important agricultural commodity in Iowa, behind corn, and accounted for more than 23 percent of the State's total agricultural receipts (Iowa Agricultural Statistics).

In 1997, Iowa ranked first among all States, with 22 percent of the total number of hogs in the U.S. As is true elsewhere, Iowa has experienced a trend towards fewer, larger hog farms. However, Iowa has also seen a decline in the total number of hogs, with hog production shifting to Southern and Southeastern States. In 1987, there were more than 40,000 hog farms in Iowa, 37 percent of all farms in the State.

By 1996, the number of farms with hogs declined 47.5 percent to 21,000 farms. The December 1 inventory of hogs in Iowa declined 18.6 percent between 1991 and 1996, from 15 million head to 12.2 million head. Iowa's share of U.S. hogs dropped from 25.8 percent in 1986 to 22 percent in 1996. This decline is a major concern in Iowa since hog production provides a way to add value to the State's corn crop, a market for other feed-stuffs, demand for farm services and equipment, and jobs in the marketing, slaughter and processing sectors.

A second reason for selecting Keota as a case study is that smaller hog operations in the U.S. are facing significant challenges driven by new production technologies, structural changes in the meat packing industry, shifts in consumer demand, and changes in food distribution. Production technologies have led to the construction of large-scale hog production units that are able to produce hogs at lower costs. Consumer demand for leaner and more consistent pork products has meant meat packers need large numbers of uniform quality hogs from a single source. The demand for a uniform product is reinforced by the fact that an increasing percentage of this country's food supply is distributed via highly integrated agribusiness firms. Larger scale hog operations have benefited from these changes.

The "traditional" hog producer with less than 500 sows is struggling to compete with these larger, more modern, and more labor-efficient hog operations. Capital costs and associated market risks are real barriers to entry into hog production by younger people. The new programs at the Farmers'

Cooperative Association of Keota (FCAK) are an innovative response to the challenges faced by smaller, independent hog producers throughout the country.

Third, this case represents an example of the benefits of local and regional cooperatives working together on a common challenge. The FCAK was experiencing a decline in the hog sector, which has been a critical business for the cooperative. The regional cooperative, on the other hand, was concerned about ensuring a continuing supply of hogs of consistent quality for its processing business. In 1990, FCAK decided to address the declining trends in Iowa's hog industry. Through its regional cooperative affiliate, Farmland Industries, Inc., FCAK developed a program that has reversed the decline in hog production in the county and had a significant economic impact on the City of Keota and the county as a whole. The FCAK project is a model that could be duplicated in other communities, not only for hog production but perhaps for cattle and dairy production as well. This case also presents an interesting model of collaboration between a local cooperative and its regional that can serve the interests of both.

Socio-Economic Profile

As shown in Figure 1, Keota is located in Keokuk County in southwestern Iowa, about 40 miles from Iowa City. The county's population of is 99 percent white, compared with 96 percent white for the State of Iowa. Like many rural Midwestern communities, the county and city experienced a population decline during the 1990s, 0.3 percent and 3.1 percent respectively (www.profiles.iastate.edu/county). While the percentage of the population less than 18 years of age is about the same for Keokuk County, the State of Iowa, and the U.S. (25.9 percent of the total), the Town of Keota has relatively few young people; 21.1 percent of its total population is 18 or less (see Table 1). A larger percentage of the county's population is 65 or older (20.8 percent) than in Iowa or the U.S. These population characteristics are typical of many Midwestern rural communities. Young people migrate away from them because of limited employment opportunities and lack of consumer goods and services. Twenty-eight percent of the population of Keota, who are age 25 or older, lack a high school diploma, 43.4 percent have a high school diploma, 13.7 percent have some post high school education, and 14.9 percent have an associate or bachelor's degree.

In 1990, the unemployment rate for Keota (4.7 percent) was similar to the county (4.5 percent) and the State (4.3 percent) (Table 2). But the average per capita income of \$11,174 is considerably below county, State, and national levels. In 1995, the U.S. Commerce Department estimated that the county

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

Age Profile	Keokuk County	Iowa	U.S.
		<i>Percent</i>	
Under 18 years	25.9	25.9	25.7
18 to 64 years	53.3	58.7	61.8
65 years or older	20.8	15.4	12.5

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

ranked 87th among Iowa's 99 counties in per capita income (Bearfacts). Thus, Keota is a relatively poor community in a relatively poor county—conditions that reflect the older age, the low levels of education, and lower wage employment opportunities relative to the State or the Nation.

However, despite the lower per capita income, the percent of the population below the poverty level was lower for Keota (10 percent) than in Keokuk County, Iowa, or the U.S. In large part, the lower poverty level in Keota may be explained by the high rate (95 percent) of women employed outside the home, meaning two-income households are common.

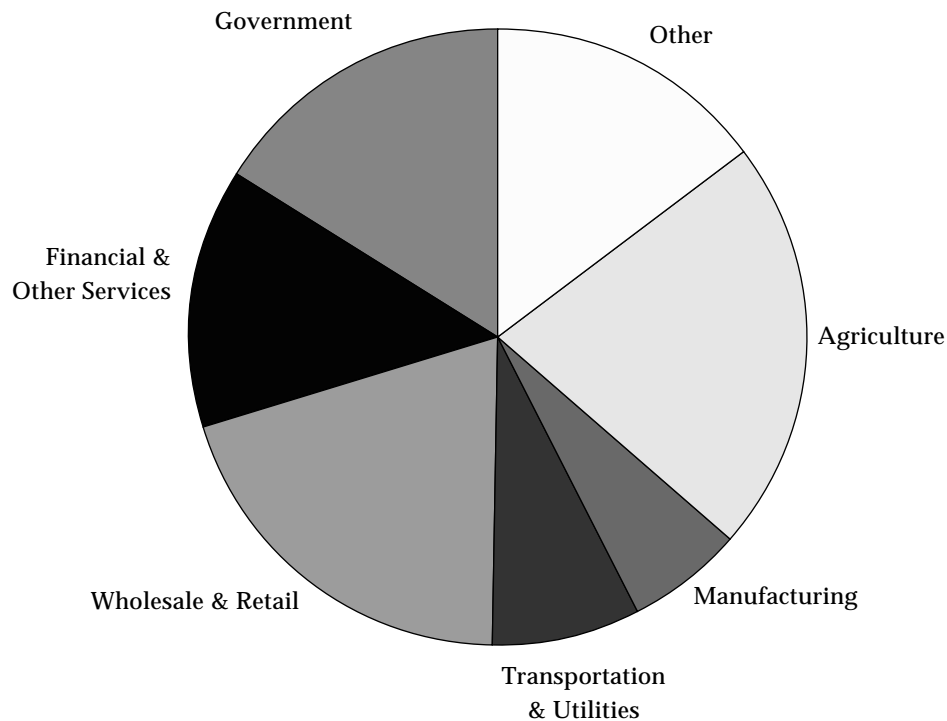
The economic structure of Keokuk County is illustrated in Figure 2. Clearly, agriculture is a critical component of the economy, accounting for 22

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.
Percent unemployment	4.7	4.5	4.3	
Percent 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.

Figure 2—**Sources of Earnings, Keokuk County Average 1991-1995**



percent of total earnings. Agriculture has also been a highly volatile sector, with earnings over the 1986-95 period ranging from a high of nearly \$32 million to a low of \$6 million. The next largest source of earnings for county residents is in the retail and wholesale trade (20 percent), followed by government (16 percent), other (15 percent), which includes agricultural services and construction, and financial and other services (14 percent). Manufacturing accounts for only 6 percent of earnings in Keota. Thus, Keokuk is more agricultural and has a weaker manufacturing base.

Cooperative Profile

FCAK is a local farm supply and grain marketing cooperative affiliated with Farmland Industries, Inc. Gross sales at FCAK totaled more than \$22 million in 1997. Agronomy (fertilizer, chemicals, and seed) 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, making it one of the largest employers in town.

In the early 1990s, FCAK's management realized that the hog industry in Iowa was changing. A meeting with an Iowa State University Extension specialist in 1991 focused on the structural changes in hog production and confirmed the thinking of management and some board members that some action was required to ensure that hog production would remain in the community.

Not only was the number of hog farmers declining, but competitors were offering various services (record keeping, for example) to hog farmers and taking business away from FCAK. The board decided that FCAK also needed to provide hog producers with new services. Farmland was approached for assistance. As a result, Farmland hired a swine specialist in 1993 to provide management services to FCAK members.

In 1991, the management and board gathered information about the changing hog sector from a variety of sources, including industry magazines, hog production meetings sponsored by the Iowa Institute of Cooperation, and Iowa State University. They also invited a Farmland representative to a board meeting to discuss what Farmland could offer to maintain or expand hog production in Keokuk County.

Farmland offered two types of swine programs: an "alliance farm system" and a "contract building system." Through these programs FCAK members can participate in the Farmland pork system which focuses on the "farmer-owners raising quality animals to supply the leaner pork that today's consumers prefer."

The alliance farm system provides a single source of high-quality feeder pigs to hog farmers who are members of one of Farmland's local farm supply cooperatives. In the alliance system, farmers retain ownership of the production facilities and the hogs, accept all risks, and reap 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;
2. source of feeder pigs of high genetic quality;

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; and
5. services and feed provided by the local farm supply cooperative.

Through the alliance system, relatively small independent hog farmers have the same genetics, management expertise, and marketing coordination as do relatively large hog operations. Alliance system hog farms are competitive with larger operations and have remained profitable. This system, therefore, offers a way for smaller hog farmers to maintain profits and stay in business. Prior to this program, smaller hog farmers were leaving the sector in droves because of low levels of profitability.

Under the second alternative, the contract building system, farmer-members invest in the hog finishing buildings and provide labor for the hog finishing process. Farmland owns the farrowing facilities, retains ownership of the pigs with the price and production risks, provides the feed, and covers health maintenance costs. In some contracts, a premium is paid for reaching defined 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 FCAK if the farm is located within a 25-mile radius of the cooperative. This agreement holds for 10 years, after which a farmer is free to purchase feed from an alternative supplier. The local cooperative benefits from these contractual arrangements through growth in sales of feed and other services.

Each month for almost a year the board discussed the advantages and disadvantages of hog production programs offered by Farmland to growers. Changes in the hog industry made directors look beyond their own farms and consider the interests of the cooperative as a whole. The key decision facing the board was whether to invest members' capital to encourage hog production or to expand grain handling and storage facilities. FCAK would have to spend capital on a new feed mill if it opted to encourage hog production.

After an initial analysis in 1992, the management and board decided to present a proposal for collaborating with Farmland's swine program to the general membership. During three membership meetings in early 1993, information was presented on structural changes in the hog industry, the type of hog the packers were demanding, 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 Association of Keota, and a hog farmer from another area of Iowa who was involved in Farmland's swine program. Much of the discussion at these meetings, and many questions, centered on whether Farmland or FCAK should be involved in contractual arrangements for expanded hog production. The reaction ranged from those who thought it was a great idea to those who saw it as a threat to their own hog operations.

Based on the results of these meetings, the board decided to participate in Farmland's swine program. The decision was very controversial and led some members to quit doing business with FCAK. Before FCAK could initiate Farmland's program, State law required formal approval by the membership.

It took nearly 3 years to go from the genesis of the idea in 1991 to the completion of the first contractual hog operation in late 1993. But, during the subsequent 18 months, interest in contractual hog production facilities

increased with six more units beginning construction. By 1997, eight members were participating. While the number of participants is small, the impact of the program has been very significant. The growing acceptance of and participation in the swine program demonstrates the benefits of the educational efforts about structural changes in the hog industry by the FCAK, Iowa State University, the Iowa Institute of Cooperation, and Farmland representatives.

Research Findings

Because of the sensitivity of the Farmland program in the local community, focus groups were not as extensive in Keota as in the other cases. Those interviewed included the FCAK's general manager, the assistant manager responsible for the swine program, two past board members who had been involved in the planning for the swine program and for member voting, two current board members, two individuals from Keota financial institutions, two members participating in the swine program, and the agricultural extension agent for Keokuk County.

Community Impacts—Overall, the swine program has helped Keota survive and its impact is obvious in many aspects of the community. The citizens and businesses of Keota recognize the economic importance of hog production for their community. The expansion in hog numbers in the county has prompted local business expansions and, in turn, employment. Younger people have been able to find jobs and stay in the community. Local merchants have gained revenues from multiplier effects and the higher profit levels have increased the availability of credit from the local bank.

The construction of hog facilities has provided employment for local building contractors and increased the need for local veterinarians. The additional employees of the cooperative and other businesses have had positive impacts on local restaurants, the grocery store, and other providers of consumer goods.

Furthermore, the tax base and community pride have increased. 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. FCAK also provides the community with much needed competition for both agriculture and some consumer goods and services.

In the initial planning and implementation phases of the swine program, concerns were raised in the community about the environmental impact of an expanding hog sector in the area. Some farmers and others were also concerned about contract farming and loss of economic independence. Clearly, the very weak pork prices that prevailed in 1998 and 1999 have illustrated the risks associated with agriculture in a global environment, especially for highly leveraged producers. However, as producer-members and individuals within the community observe the positive impacts of the swine program on both the cooperative and the community, these concerns have subsided.

Impact on FCAK—FCAK now actively participates in the Farmland swine program. Initially, there were a few problems with the program. Some members felt Farmland did not disclose all the information required for farmers to make rational decisions on whether or not to sign the hog production. Some felt that contractual arrangements details 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 caused by startup and disease problems. Higher than expected feeder pig costs resulted. However, since these early problems, the alliance farm members appear to have been quite satisfied with the Farmland program.

A few problems were also encountered with the contract building program. Early contracts were better than later ones in terms of premiums paid by Farmland to program participants. Some felt that alliance farms got better feeder pigs because they had investments in the farrowing facility. Initially some members had difficulty obtaining reasonable credit to enter the program. Since then, local financial institutions have gained experience from these contractual hog production arrangements and are more willing to provide the necessary financing.

The impact of swine program on FCAK has been very positive. While only eight members participating in the swine program may seem rather small, these eight hog production units account for 48 to 51 percent of the cooperative's feed business. The cooperative now has a very modern feed mill to serve its members efficiently and competitively. 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 who produce hogs or other livestock also, benefit from this modern feed mill operating at near capacity. Expanded hog production in Keokuk County has also improved the market for corn grown by crop farmers and local corn prices are stronger as a result. The savings in trucking the corn out of the area to find a market, by itself, results in a higher net corn price. FCAK also hired a grain marketing specialist and now provides members with precision agriculture services.

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

Trust in the cooperative system by members seems to have increased since the start of the swine program. Members know the cooperative will be there to serve them in the future and a mutual long-term commitment is in place. The swine program forced members to become informed about trends in the pork industry. Contractual hog operations have become more socially acceptable in the Keota community as a result of the program.

Table 3 summarizes the impact of the swine program and other business initiatives by FCAK during the 7-year span (1990-97). The table shows that KFCA had very strong growth in all of its business activities, except farm supplies, which is a small share of its business. Gross sales increased 134 percent from \$9,480,517 to \$22,220,965. Although this growth cannot all be attributed to it, the swine program did enable the cooperative to expand its feed business. Feed sales increased 86 percent and the feed grinding and mixing business increased 222 percent. As is often the case, strong business growth in one area enables the cooperative to expand its services to members in other areas.

Members began patronizing the cooperative for more than one or two business services. Grain sales went from only \$279,328 in 1990 to \$6,083,798 in 1997. Agronomy sales increased 93 percent. Since 1990, membership increased 85 percent, from 360 to 668 members, with increases in both class A and class B membership. Higher feed and grain sales and sales of other products increased employment opportunities in Keota. Employment at the cooperative increased from 23 people 7 years ago to 47 employees today, a significant increase for a community of less than 1,000 residents.

Table 3—**Growth in Business by Farmers' Cooperative Association, Keota, IA, 1990-97**

Business Activity:	1990	1997	Percent Change
Gross sales:			
Grain	279,328	6,083,798	2078
Feed	2,147,669	3,993,924	86
Agronomy	4,673,380	9,037,313	93
Petroleum	2,051,251	2,722,814	33
Farm Supply	282,582	233,649	-17
Feed Grind & Mix	46,307	149,467	222
Total	9,480,517	22,220,965	134
Number of members:			
Class A	289	550	90
Class B	71	118	66
Total	360	668	85
Number of Employees	23	7	104

Needs for Assistance

The Keota project clearly demonstrates the critical need for research-based information to develop solid producer-member education programs early in a project's life. Most research on these types of projects will be provided jointly by the regional cooperative and universities. However, because the Keota model may be applied to other communities or other types of production animal agriculture, research is needed on the continued success of participating producer-members, documentation of environmental impacts and the economic multiplier impacts on both the cooperative and the community. Educational programs should be developed by universities to assist other cooperatives considering similar animal production projects. There appears to be less of a need for technical assistance from universities because regional cooperatives and private consultants appear able to meet these demands. Nevertheless, some producers may wish to seek technical advice from university experts to verify information provided by others.

Lessons Learned

Projects like the swine program pursued by the FCAK are often controversial. Although hog farmers are concerned about the lack of profitability in hog production, the rapid loss of the State's hog farmers, and a decline in hog numbers, many of these farmers view larger hog production units as a threat to their businesses. So when FCAK promoted the idea of contractual hog production arrangements, some members strongly objected. It is, therefore, necessary that a cooperative considering a similar project provide as much information as possible to its members. This should include the benefits to members, the impact on the cooperative's profitability, the availability of new services, and the potential economic impact on the local community in terms of business and

employment. To inform the members, a cooperative needs to work with industry representatives, universities, farmers who have had experiences with similar programs, and local community leaders.

Before moving ahead with a major new initiative, the board of directors and management must be knowledgeable and convinced of the potential benefits first to members and second to the cooperative as a business. Board and management must be mindful that cooperatives exist to meet the needs of members. They should also not underestimate the time required to implement such major strategic changes. Research to gather all of the facts, holding member informational meetings, and gaining membership support take time. From the initial concept to implementation, a major project such as this will take a minimum of 2 years.

Finally, controversial projects require support not only from the members of the cooperative but from members and businesses in the community as well. The cooperative must be viewed as a good citizen and an economic benefit to the community.

Summary and Conclusions

The FCAK swine project was done well and appears to be highly successful. It demonstrates that a local cooperative through contractual arrangements with its regional cooperative can assist existing and new members in operating profitable hog production facilities. The cooperative model is an alternative to keeping hog production in the hands of farm families and, if successful, has many multiplier effects. A more profitable cooperative can offer more services to its members and the community. Enhanced profitability of the farmers spills over to enhanced business activity in the local community and more local employment opportunities.

Reference:

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Northeast Missouri Grain Processors, Inc.

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Editor's Note: The Northeast Missouri Grain Processors' board of directors was advised by its attorney about constraints of what they can and cannot discuss regarding this project. All members of the board who participated in the community visit strictly adhered to that advice both in the focus group meetings and in individual conversations.

Introduction

To address concerns about dependence on foreign sources of petroleum and to provide an economic boost to U.S. corn farmers, Federal and State governments provide tax exemptions for producers of ethanol that amount to about 60 cents/gallon of ethanol. Because of this subsidy and the demand for oxygenated fuels to attain clean air standards, ethanol production has expanded significantly throughout the Corn Belt. A number of the ethanol plants that have been constructed during the past decade are new generation cooperatives.

Northeast Missouri Grain Processors, (NMGP) Inc. is trying to become the first "new generation" cooperative (NGC) in the State by constructing an ethanol plant in Macon, MO (Figure 1). For this reason, NMGP offers a number of interesting perspectives as a case study.

First, Missouri is not the epicenter of NGC development. Hence, this case is an interesting illustration of some of the opportunities and challenges faced by those attempting to transplant this innovation from the Upper Midwest, where it first developed, to other parts of the country. Second, the case study was done during the planning phase of NMGP so the case study provides valuable insights into some of the challenges awaiting those who want to start a new generation cooperative. Finally, this case illustrates the institutional challenges faced when trying to develop a new generation cooperative in a State with no direct experience with this relatively new business form.

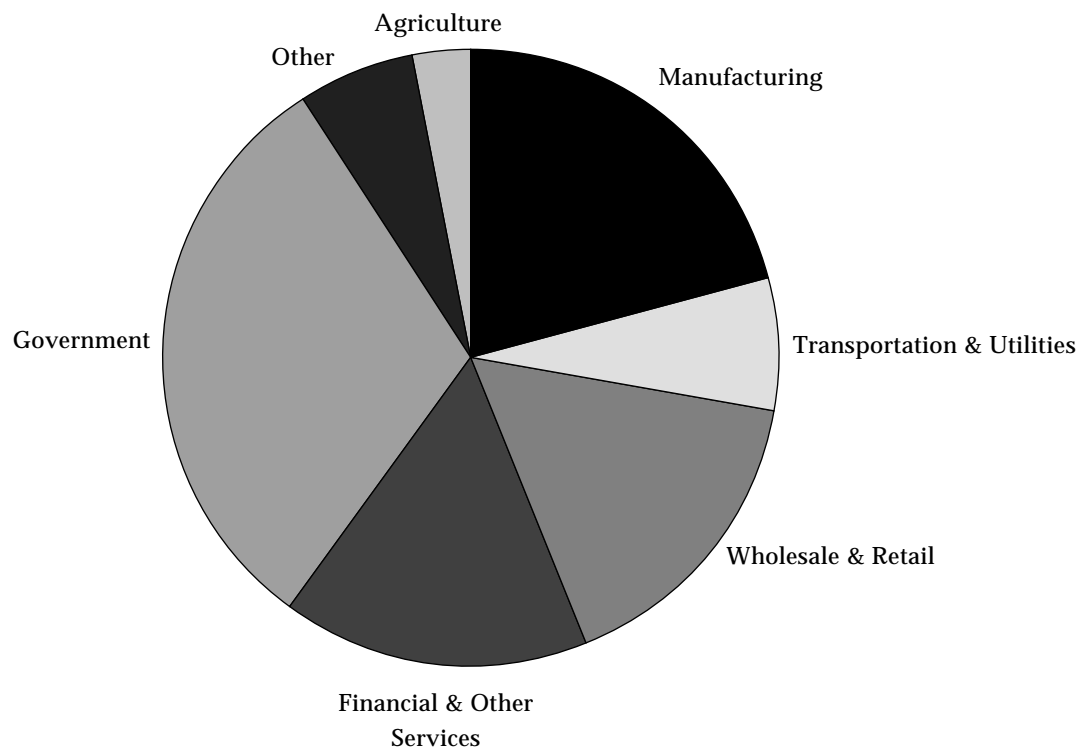
Socio-Economic Profile

Macon, the county seat of Macon County, is in north central Missouri, about 60 miles north of Columbia. The county's 1990 population was 15,345 and declined by 6 percent over the 1986-1995 period. Ninety-seven percent of the people in the county are white and 2 percent are black. Twenty-one percent of the population are over 65 years of age versus 13 percent nationally as of

Figure 2— **Location of Macon, MO.**



Figure 2— **Sources of Earnings, Macon County Average 1991-1995**



Source: Regional Economic Information System (1969-1995), Dept. of Commerce

1990. Thirty percent of the population older than 25 lacked a high school diploma, which is somewhat higher than the national rate of 25 percent (Bear Facts).

The 1990 unemployment rate in Macon County was 7.9 percent or 2 percent above the national rate at the time. Since then, employment in the county has been unstable. The closing of Associated Electric Cooperative's mine at Thomas Hill in Randolph County left about 500 persons unemployed. Macon County was especially hard hit. Employment at manufacturing firms has fluctuated throughout the decade. Macon County's per-capita income also lags the State average. In 1990, 14 percent of the population was below the poverty level or about the national average (Bear Facts).

The main pillars of the county economy (Figure 2) are Government and manufacturing. Together, these two sectors account for half of the earnings in the county. Earnings in the manufacturing sector, however, have been stagnant during the early 1990s. In contrast, substantial gains have been made in the financial and other services and in wholesale/retail sectors during the 1990s.

Agriculture, as is true in the other cases considered, was by far the most volatile sector in the county's economy. Despite being the smallest sector considered, with average earnings of about \$3.8 million per year, agriculture had the highest level of variability as measured by the standard deviation. There are a relatively large number (1,127) of small farms (average 339 acres) in the county. Agricultural production is evenly split between crops and livestock, with each generating slightly more than \$16 million in gross sales in 1992. Beef cattle and hogs are the primary livestock enterprises and corn, soybeans and forage are the dominant crops (Census of Agriculture).

NMGP Background Information

NMGP is a non-profit cooperative marketing organization incorporated under Chapter 274 of Missouri State statutes. (Missouri has two separate agricultural cooperative statutes: Chapter 274 provides for the incorporation and operation of a non-stock cooperative and Chapter 357 provides for the incorporation and operation of a stock cooperative.) The cooperative was formed to explore the economic feasibility of constructing an ethanol plant. The goal is to create a new market for corn that adds value to this basic commodity, thereby increasing members' profitability.

The group organizing NMGP is trying to raise between \$7 million and \$13.75 million of producer equity to construct a plant with annual production capacity between 7 million and 15 million gallons of ethanol. The plant is expected to use up to 5.5 million bushels of corn as feedstock for the plant. A 15-million-gallon plant would initially employ 30 people (5 in management and administration and 25 in plant operations). Byproducts from the dry milling plant will include dried distillers grains plus solubles (DDGS), a high-protein animal feed. Total costs for the project are estimated to be between \$14 million and \$27.5 million.

The idea for forming the cooperative in the fall of 1994 stemmed from discussions among farmers who were also board members of the Missouri Corn Growers Association (MCGA). While attending national meetings, this group talked with farmers involved in ethanol projects in other States. Based on these contacts, some members of the MCGA toured new generation cooperatives in

Minnesota and North Dakota. The success of farmer-owned ethanol cooperatives, particularly in Minnesota, encouraged Missouri farm leaders to explore further the feasibility of an ethanol project.

In December 1994, a meeting was held to determine the breadth of interest in building the ethanol plant and to decide how to proceed. The meeting involved farmers, agribusiness and economic development leaders, State representatives, and the Missouri Department of Agriculture. A member of Minnesota Corn Processors (MCP) attended this meeting and discussed its ethanol plant. Later, the group developed a mission statement and formed subcommittees for administrative issues; finance; membership, engineering, construction and site selection; public relations; and legislation (to develop recommendations regarding State policy).

In March 1995, the group filed incorporation papers including bylaws. The initial board had 12 farmer-members. A 13th was added later. The board sought and received donations from individuals, agribusinesses, rural electric cooperatives, and the MCGA. The funds made it possible to hire a private firm to conduct a feasibility study. In September 1995, a second meeting of farmers, agribusiness and economic development leaders, and State policy makers was held to review and discuss the feasibility study and hear reports from the subcommittees. The results of this meeting encouraged the group to proceed to the site selection phase.

From March to October 1996, a detailed and formal site selection study was conducted. A request for proposals from the northeastern quarter of Missouri generated applications from 9 counties representing 15 communities. Each proposal contained extensive information about corn production within a 50-mile radius, statistics on the area's livestock industry, local corn prices, utility rates, transportation costs, availability of tax increment financing, and enterprise zones. Directors and their consultant visited each proposed site.

Narrow Sites—The board narrowed the selection to three locations. The finalists were permitted to review and make improvements to their plans. Initially unable to reach a consensus on the final site, the board developed an evaluation worksheet. Each director ranked each proposal on the basis of 12 criteria on a scale of 1 to 5, with 5 being the highest rating and 1 the lowest. Once the board completed the worksheets, they reached a unanimous decision to locate the plant in Macon. However, the other two finalist communities have not yet reconciled themselves to the decision. This has hurt the cooperative as it seeks members to capitalize the plant.

By early September 1997, the cooperative completed a business plan. It included identification and selection of professional advisors: an accountant to help develop financial projections, an engineer to prepare plant designs, and a consultant to assist with the business plan refinements. The plan integrated information from the accountant, engineer and an attorney. All of the consultants, except the attorney, came from outside Missouri. Both the accounting firm and engineering firm worked on a contingency fee basis. However, the agreement with the consulting firm assisting with the site selection process was terminated in May 1996, because of disagreements between the firm and legal counsel regarding the structure of the cooperative.

During this time, the cooperative received approval of its stock-offering circular and was granted an exemption from securities registration by Missouri's Secretary of State. The cooperative is awaiting action by the Internal Revenue Service on its application for Section 521 tax status. It allows cooperatives to include more types of income (e.g. any income from non-members) in

the single-tax treatment that is afforded to cooperatives. Single tax treatment allows some types of income earned by the cooperative that is returned to its members as patronage refunds to be taxed only at the member level.

Informational Meetings—They began in December 1997 and continued until April 1, 1998. By mid-February 1998, about 25 meetings had been conducted in 25 counties. Producers who attend these meetings received:

- a summary and background of the cooperative,
- biographical information on the board of directors,
- a description of the cooperative's structure,
- the cooperative's bylaws,
- an outline of the rights and responsibilities of the membership,
- a membership payment schedule,
- a statement of assumptions used in financial projections,
- the income and balance sheet projections,
- a description of the limited liability company formed to own and operate the plant, and
- a description of the trading company that will be formed to sell the by-products.

At these first meetings, growers interested in the cooperative were allowed to keep and study a notebook detailing this information. At a second meeting two weeks later, those who intend to join were expected to make a financial commitment to the cooperative.

NMGP will be a defined membership organization, once all of the shares in the ethanol plant are sold; new growers will have to purchase share(s) from current members at the going market rate. To be a member, one must be a bona fide agricultural producer of corn and make a minimum investment in the plant. This investment entitles and requires them to deliver a specific number of bushels of grain to the ethanol plant. Members enter a uniform marketing agreement with the cooperative. Members have the right of first refusal to purchase the distillers dry grain solids (DDGS).

A limited liability company (LLC) will be formed to own and operate the plant. Proceeds from the equity drive will be the cooperative's capital contribution to Northeast Missouri Grain Processors, LLC. If the cooperative does not raise the maximum level of equity from producers, the LLC structure allows for additional financing through capital contributions by other members (both corporate and individual investors). These other investors will also be obligated to deliver corn to the LLC. In addition, a trading company will be organized to buy and sell grain and other material to maximize efficiency of plant operations. The trading company will also sell DDGS.

Commitment—In their initial equity drive, 274 members purchased 1,632 units of stock at \$2,500 per unit or an equivalent of \$4,080,000 in producer equity. Each unit represents a commitment to deliver 1,000 bushels of corn annually to the plant. Rather than build a small plant, the board voted to open a second equity drive in August 1998. NMGP was authorized to sell up to 2,200 units. The second equity drive will remain open until all 2,200 units have been sold or until the board closes the offering. As of August 1999, 528 additional units had been sold. Existing members purchased 388 additional units during the second equity drive. Twenty-eight new members purchased 140 units at \$3,000 per unit.

As of August 1999, 302 producers had invested \$5,455,000 in the project. The total project cost is \$22.8 million for a 15-million-gallon ethanol plant. The plant will process 5,357,143 bushels of corn annually. NMGP holds an 84 percent share of the LLC that owns the ethanol plant. There are three other members in the LLC. Two of them each own slightly more than 7 percent of the LLC and the other member owns less than 1.5 percent. Groundbreaking for the project occurred April 17, 1999, and operations began that fall.

NMGP's equity drives were given boosts by two public policy decisions. First, the extension of the Federal tax credit for ethanol was important because it enhances the economic viability of such projects. Second, a law enacted by the 1999 Missouri State legislature established a tax credit for producers who invest in new generation cooperatives. The program provides a tax credit of up to half of the producer's investment but no more than \$15,000 per individual. The tax credit program also carries a \$1.5 million cap per project to be apportioned among the members. In the case of NMGP, the tax credit will equal about 27 percent of each farmer's investment.

Research Findings

Three groups associated with NMGP were interviewed about the cooperative. One was composed of local citizens and included agricultural bankers, chamber of commerce representatives, city and county Government leaders, cooperative extension, farm credit services, rural electric cooperatives, and USDA Rural Development. A second group included corn producers, some of whom had decided to join the cooperative, and others still considering membership. Finally, six members of the board of directors were also interviewed. All of the directors, except one, have been a part of the initial core and on the board since it incorporated. The project champions, who were serving as board chair and treasurer, were interviewed individually.

Community Impacts—Jobs and an increased tax base are viewed as the most important community impacts of the new cooperative. There was a strong consensus that jobs were the most important and a larger tax base the second most important benefit of NMGP. The producers, on the other hand, rated increased tax revenue first followed by increased employment opportunities.

Both groups also identified the prospects of additional business opportunities (both for cooperatives and IOFs) as an important benefit. In the short-term these opportunities would include additional demand for services from existing businesses and perhaps new businesses directly related to the cooperative's activity, such as trucking.

In the longer term, the presence of NMGP might attract other new, unrelated businesses and foster the development of more cooperatives. Specifically, participants identified the demonstration value of this cooperative as a model. Both community leaders and farmers expect other value-added cooperative ventures to follow. Concern was expressed that if this cooperative was unsuccessful, it might have a negative effect on other value-added cooperative activities in the State. The keen interest of producers in expanded, future opportunities for farmer-owned, value-added enterprises underlies their investment decisions and their hopes for NMGP.

Few negative impacts of NMGP were identified. One concern was a potential increase in the demand for local Government services. A second, from the perspective of other employers in Macon County, was a shortage of employees. If the NMGP and related businesses substantially increase the

demand for labor, this could put upward pressure on wages, raising the cost for other businesses in the area that would have to compete for workers. Some environmental concerns were also identified. Finally, the selection of Macon reduced the support for the project by producers from communities that were not selected.

Producer Impacts—The primary benefit of NMGP to producers was to improve their profitability by enabling them to capture more of the returns associated with processing corn. There are, additionally, expectations that the plant will improve the local price of corn, helping members and non-members who sell corn on the open market.

While producers emphasized personal financial reasons for investing in NMGP, they also identified beneficial impacts on the community associated with the creation of this cooperative. Producers' expectations for the plant were realistic in that they did not assume that the plant would immediately be profitable. Of more immediate concern was the question of whether the cooperative would meet the investment targets required to build the plant and begin operations.

Some felt that NMGP could have negative impacts on its members. The primary concerns focused on the cost of becoming a member of NMGP and on the long-term prospects for continued legislative support of ethanol. Loss of the ethanol subsidy could put members' investments at great risk. Concerns about the effect of the plant on feed costs for local livestock producers were also discussed, although there was no unanimity about the extent of these effects.

Because the cooperative was in the midst of formation, producers were asked what types and sources of information would help them make the participation decision. The most important information needed was insight on the specifics of the project and on the market prospects for ethanol. All identified the cooperative prospectus, feasibility study, and business plan that were made available by the board during informational meetings as being very important. Direct responses by board members to questions were also cited as important, as were one-on-one discussions with directors. Other useful sources of information included farm organizations, word of mouth, general news, and farm magazines.

Needs for Assistance

While the focus group participants felt that educational programs, research, and technical assistance were all very important for communities and new generation cooperatives, technical assistance was their top priority. Specifically, they wanted assistance with forecasting the economic impact of such projects and strategic planning.

Research and education, while less important than technical assistance, were also seen as important. Participants wanted research focused on identifying factors associated with successful new generation cooperative projects. Regarding educational programming, understanding principles of community economic development was identified as important.

Lessons Learned

Five key lessons were learned from this case study. First, groups interested in forming NGCs must remain flexible. For example, NMGP, changed its initial opinions about the type of technology to be used in its plant and on the pre-requisites for good plant sites.

Second, don't underestimate the time required to develop a new generation cooperative. The time required to develop NMGP has been much greater than anticipated, in part because this was the first defined membership cooperative in Missouri. Many people involved (farmers, lenders, State legislators and State agencies) were not familiar with NGCs and it took a lot of time to educate them.

Third, the legal setting in a given State can have an important impact on the process. Therefore, the statutes governing new generation cooperatives in a particular State must be understood. Many of the procedures used in the formation of new generation cooperatives in the Upper Midwest, upon which NMGP is patterned, were deemed by the cooperative's attorney to be illegal under Missouri statutes and regulations. This, again, considerably slowed the development of NMGP.

Fourth, economic development programs at the State and local level are often ill suited to cooperatives. State agencies tend to be much less user-friendly toward cooperatives compared with other forms of business. Further, it was hard for NMGP to identify programs and sources of assistance that might have been appropriate for the project. Existing programs often required excessive red tape.

Fifth, accessing the knowledge and expertise of others interested in rural development is an important and valuable resource. The support of rural electric cooperatives was especially helpful to NMGP. In addition, NMGP benefited from several paid consultants during the development of their business plan. Given the magnitude of the investments needed and the complexity of the processing plant, tax laws and legal requirements, such outside expertise is often invaluable.

Challenges and Opportunities

The most immediate and pressing challenge facing NMGP was to complete its drive to raise equity capital. Raising equity capital is often the most daunting challenge faced by champions of new generation cooperatives. In the case of NMGP, the challenge of raising equity capital is compounded by several factors, including:

- local farmers were unfamiliar with this type of cooperative;
- there was uncertainty regarding Federal and State legislation for ethanol;
- the variability of weather in this part of Missouri often puts heavy demands on a farmer's cash flow reserves; and the restrictions, as interpreted by the group's attorney, in Missouri law regarding the sale of investment securities.

It is important to note that the cooperative relied on the opinion of its legal counsel regarding an interpretation of Missouri law and regulations as it relates to equity offerings by cooperatives. Given the significant restrictions

that have been imposed by these opinions, a review of Missouri law and regulations to determine the extent of flexibility in these interpretations is warranted.

Absence of an adequate base of knowledge about the structure of NGCs and Missouri laws/regulations were major constraints. They increased the time needed to develop the cooperative and impeded efforts to raise equity capital. Acting on the advice of its attorney, the board limited public statements and advertising regarding informational meetings. As a result, much of the public was uninformed about the development of the cooperative. Further, some of the information being circulated was inaccurate and created suspicions about the effort. A number of key community leaders were eager to support the cooperative, but frustrated by the difficulty of getting the information they needed to become backers.

Another key challenge has been the need for education about cooperatives in general and particularly NGCs. Critical audiences include financial institutions and farmers. Project leaders felt that bank mergers and consolidations had reduced the understanding of cooperatives within these institutions. They felt that as lending institutions become larger, they are more removed from agriculture and cooperatives.

Because this is a new organizational form for Missouri farmers, it was necessary to explain the differences and similarities between new generation and traditional cooperatives. The lack of examples of value-added cooperatives in Missouri increased the need for general educational efforts to provide a needed background for the specific project.

Just as being the first value-added cooperative in Missouri has added to the challenges, it also presents the opportunity to be a significant model for future endeavors. The board also sees tremendous opportunity for both universities and the State to develop programs to provide technical assistance to groups in the process of forming new generation cooperatives. The two things that are particularly important are people to assist with the process and financial resources to help defray some of the cost of feasibility studies and business plans.

The Missouri Department of Agriculture has recently hired a cooperative marketing specialist whose job includes assisting producers with cooperative development. In 1997, the Missouri legislature authorized the creation of grant programs to assist with activities such as feasibility studies and business plans for projects that add value to agricultural commodities. A second new program was authorized to provide partial loan guarantees for lenders who make loans to assist with value-added projects. In 1999, the legislature expanded the funds available to assist value-added projects and broadened the role of the Missouri Agricultural and Small Business Development Authority in providing technical assistance to value-added agricultural projects. The State legislature also established a tax credit for producers who invest in NGCs.

Summary and Conclusions

The board, farmers, and community leaders believe the first successful new generation cooperative will have a powerful demonstration effect. Numerous other farmer-led, value-added projects are expected to follow.

NMGP hopes to be the first NGC in Missouri, but as board chair John Eggleston noted, “It will be much easier to be second than it is to be first.” NMGP leaders have already provided an invaluable service to Missouri’s farmers. The project’s leaders have invested countless hours expanding the understanding of value-added cooperatives among farmers, elected representatives, and agribusiness, community, and Government leaders. As a result, it is apparent that a review of Missouri law and regulations is needed. A legal/policy advisory committee is needed to clarify current laws/regulations develop needed corrective legislation, and evaluate enabling legislation for NGCs. NMGP’s experience is similar to other NGCs. Discussions highlighted the need for such technical assistance as:

- a guidebook regarding new generation cooperatives;
- a feasibility study guide;
- an information clearinghouse regarding national and State programs to assist formation of cooperatives;
- assistance with applications for grants and other development programs; and
- assistance identifying potential markets and business contacts for value-added products.

The University of Missouri and USDA’s Rural Business—Cooperative Service are developing a guidebook entitled “Organizational Innovation: The Emergence of New Generation Cooperatives—A Research-Based Guide to Process, Tools and Resources.” The NMGP case study provides insight regarding the unique research, education, and outreach program needs that exist when the organizational model is first transplanted to other States. Education and information about the NGC model may not be sufficient. There are special program needs:

- General education programs about the structure of NGCs for farmers, lenders, State and local economic development leaders, and State policymakers,
- Materials to assist those promoting the first value-added project in a given State that outline the structure of NGCs plus similarities and differences with other cooperatives,
- Education programs specifically targeted toward attorneys and accountants to introduce the NGC structure and organizational process to establish an in-State technical knowledge base.
- Information for State legislators about laws and regulations in other States that deal with NGCs to develop a favorable legal/regulatory environment, including development of model enabling legislation and regulations.

The NMGP case study highlights the challenges faced by entrepreneurs who attempt to transplant the NGC concept to other parts of the country. The hope has been that farmers in other parts of the country would not have to “reinvent the wheel” but, instead, profit from the experiences of farmers in the Upper Midwest who pioneered this innovative organizational form. This case illustrates the importance of the institutional setting and of aggressive educational efforts in determining the outcome and the speed with which projects move forward.

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South Dakota Soybean Processors

Evert Van der Sluis, Gary Goreham, and Kimberly A. Zeuli

Introduction

South Dakota Soybean Processors (SDSP), like many New Generation Cooperatives (NGCs) in the Upper Midwest, focuses on transforming a commodity into intermediate agricultural products. In this case the transformation is of its members' soybeans into soy oil and soy meal. Plans for establishing the soybean processing facility developed in response to several factors.

Farmers in the region were dissatisfied with what were perceived to be low soybean prices. At the time, there were no soybean processing plants in the State. In that absence, much of South Dakota's soybean production was shipped to neighboring States for processing and about 40 percent of the processed beans were transported back to the State in the form of soy meal for livestock feed. National and international demand for soybean products has increased steadily in recent years so building a plant looked like a good investment opportunity. Finally, because of improved genetics, soybean production has expanded north and west to include eastern South Dakota, further increasing the need for soybean processing capacity in the region.

SDSP is an interesting case study because it is a relatively new NGC. It began operations in late 1996 so the memories of those who helped form the cooperative are still fresh, enabling them to easily identify the factors critical in its development.

SDSP's short track record also means that conclusions cannot be drawn about its long-term viability.

SDSP is also an interesting case study because its success or failure is not tied to Federal policy to the same extent as some other NGCs. For example, the success of an ethanol plant is tied intimately to the continuation of Federal tax credits for ethanol and methanol producers. SDSP's success will be determined largely by market conditions. Hence, in planning and marketing SDSP, participants had to carefully consider current and projected market conditions.

Socio-Economic Profile

The SDSP facility is located in Volga, about 30 miles from the Minnesota border in east central South Dakota (Figure 1). Volga, with a population of 1,316 in 1996 (U.S. Department of Commerce, 1997), is in Brookings County, classified by Butler and Beale (1993) and Butler (1990) as a nonmetropolitan county not adjacent to a metropolitan area. Census figures indicate that in 1998, the county's population of 25,989, ranked it fourth in the State (U.S. Department of Commerce, 1999a). In 1997, per-capita income in Brookings County was \$19,977, which lagged behind the State (\$21,067) and the national (\$25,288) averages, but it has been growing rapidly in recent years (U.S. Bureau of the Census, 1999b). From 1987 to 1997, per-capita personal income increased annu-

Figure 1—Location of Volga, South Dakota



ally by an average 5.5 percent in Brookings County, compared with 5.2 percent for South Dakota as a whole and 4.7 percent nationwide (U.S. Bureau of the Census, 1999b).

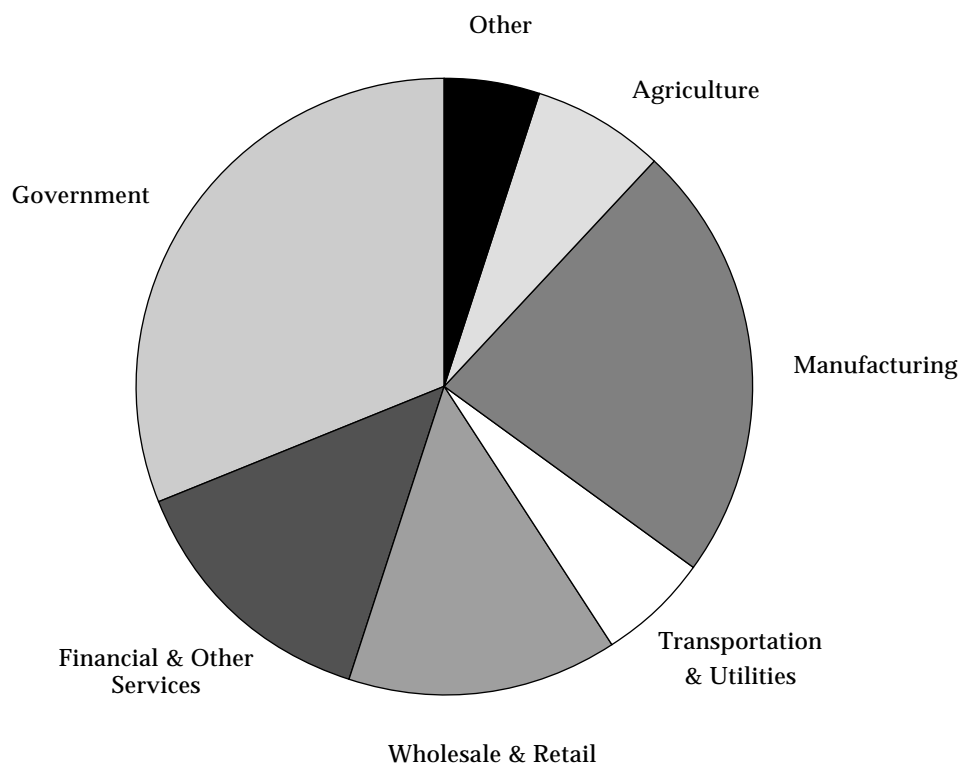
The economic structure of Brookings County is illustrated in Figure 2. It lists the average share of total earnings by major industrial sector from 1994 to 1997. The county has a diversified economy with a strong manufacturing sector. In this 4-year period, the two largest sectors were State and local Government and durable goods manufacturing, which contributed 29 percent and 26 percent of total earnings. In the same period, the agricultural sector generated 5.2 percent of total earnings in the county. While the contribution of most sectors to total earnings has been relatively stable, farm sector earnings fluctuated considerably during the last decade. Since 1987, the share of earnings by the agricultural sector varied from a high of 12.1 percent of total earnings in 1987, to a low of 2.7 percent of total earnings in 1995 (U.S. Bureau of the Census, 1999b).

Demographically, Brookings County is predominantly white—97.8 percent—and well educated—82.2 percent of people in the county who are 25 or older have at least a high school diploma (U.S. Department of Commerce, 1994). In contrast to most counties in South Dakota, the county's population increased 5.7 percent during the 1987-1997 period (U.S. Department of Commerce, 1999b). Further, compared with many nonmetropolitan counties, Brookings County has a youthful population—only 11.3 percent of the population was more than 65 in 1995.

Despite a very low rate of unemployment—2.7 percent in 1994—poverty in the county is relatively high, as indicated by the fact that 18 percent of the population lived below the poverty level in 1990 (U.S. Department of Commerce, 1994b).

The 1997 Census of Agriculture indicates that there were 886 farms averaging 460 acres in Brookings County in 1997. In the same year, there were 407,595 acres of farmland, of which 331,354 acres were used to produce crops. Principal crops grown were corn, soybeans, wheat, oats, and alfalfa. The considerable amount of livestock produced in the county provides an outlet for the soy meal produced by SDSP. In 1997, the county had more than 21,000 beef cows, 5,000 dairy cattle, 60,000 hogs and pigs, 8,500 lambs and sheep, and an undisclosed number of chickens (U.S. Department of Commerce, 1999).

Figure 2—Sources of Earnings, Brookings County, SD, Average 1991-95



Source: Regional Economic Information System (1969-95), Department of Commerce

SDSP Background

The SDSP plant processes raw soybeans into crude soybean oil, high- and low-protein soybean meal, and soybean hulls. Soy meal is sold throughout the Midwest, the Pacific Northwest, and Canada, and soy oil is marketed to Harvest States Cooperative in Mankato, MN, where the oil is further refined for human consumption. The hulls are made into pellets by SDSP and sold to an outside vendor.

Plans for constructing of the processing facility started in late 1992. At that time, a feasibility study sponsored by the South Dakota Soybean Research and Promotion Council concluded that a profitable soybean processing plant could be built in South Dakota. In early 1993, a newly formed soybean producers group interested in pursuing this idea conducted 15 meetings with farmer groups. That summer, this group incorporated as the South Dakota Soybean Processors Cooperative. Its initial board of directors updated the findings of the original feasibility study and made plans to build and operate a soybean processing plant. The board circulated a prospectus and offered stock to potential investors in South Dakota and Minnesota. By November 1993, the State of South Dakota granted cooperative status to SDSP.

SDSP organizers conducted nearly 200 meetings and reached 6,000 farmers during the winter of 1993-94. The organizers also developed a limited membership plan and a uniform marketing agreement, which outlined member delivery requirements. Members were initially required to purchase a minimum of \$5,000 in shares. By mid-1994, \$7.2 million in equity had been raised. After researching four proposed sites—three in South Dakota and one in Minnesota—the board voted in November 1994 to build the \$32.5 million plant in Volga, SD. Subsequently, an additional \$15 million in equity was raised. SDSP broke ground for the plant in August of 1995 and it was in operation by September 1996. At the time of construction, the SDSP facility was the Nation's first soybean crushing plant built since 1978 and it remains the only soybean processing plant in South Dakota.

As of 1998, the cooperative had 2,092 members, mainly in western Minnesota and eastern South Dakota. The cooperative employs about 70 full-time workers and has an annual payroll of \$2 million. In 1998, SDSP's total assets were \$48.4 million and members held \$29.2 million in equity in the plant. The cooperative's net proceeds in 1998 were \$8.5 million, of which 68 percent was paid in cash to its members, while 17 percent and 15 percent was retained by the cooperative in cash and equity patronage, respectively. In 1998, the plant processed 21.7 million bushels of soybeans, which yielded 483,410 tons of soy meal, 119,959 tons of soy oil, and 41,039 tons of soy hulls. The amount of soybeans crushed was 61 percent more than its 1997 level. The processing capacity of the plant was expanded from 50,000 to 65,000 bushels of soybeans per day in the first six months of the plant's operation, followed by an additional expansion to 70,000 bushels of soybeans per day in 1998.

Research Findings

Two groups associated with SDSP—the board of directors and selected community leaders—were interviewed to assess their opinions about the general impact of the cooperative on the community at large, as well as their perceptions about its need for technical assistance, educational programs, and research. The 21 people attending the session with the board was larger than optimal for a focus group and generated less interaction among participants during the discussion than might have been the case with a smaller group. Among participants in the community leaders group were a pastor, a bank president, a member of the local chamber of commerce, a public school superintendent, the regional director of the South Dakota Department of Job Services, a county extension agent, an individual representing the regional planning district, a widow of a farmer instrumental in developing SDSP, a representative of a local development corporation, the field service manager of SDSP who had previously been mayor of the City of Volga, and a newspaper editor and owner.

Community Impacts—Participants in both groups expressed similar opinions and raised comparable issues regarding SDSP. Both felt that SDSP's impact on the community was generally positive. Both noted that the increased employment and additional wages contributed by SDSP provided a positive stimulus to local and regional economies. Furthermore, both agreed that the indirect effects associated with the increased economic activity in the local service and manufacturing sectors helped local and regional economies. For example, members of both groups mentioned the enhanced tax base and increased size of the labor pool as positive effects. Also mentioned were improved work-

ing relationships with individuals outside of production agriculture, the potential for additional NGCs in the region because SDSP has demonstrated the viability of this type of cooperative, and the improved local infrastructure.

The investment in infrastructure improvement and upkeep were identified as negative impacts of SDSP on the community. Specifically, improving and upgrading U.S. Highway 14 next to the SDSP facility was only partly funded by State sources. Twenty-five percent of these costs came from local sources. Also, several participants indicated the heavy trucks servicing the SDSP facility have caused considerable wear on the highway. Increased road and rail traffic were also cited as negative impacts of the project.

The board of directors noted that the site selection process caused a temporary rift among the founders of the cooperative. Another site selection issue raised by the community group was that the processing facility of SDSP is not located within Volga's city limits, so that the increased tax base accrues to the Township of Volga. Others raised concerns about member dependence on SDSP, in that the cooperative may accentuate the effects of both good and bad economic conditions. Finally, members of the community group felt SDSP might reduce the economic opportunities for local elevators.

SDSP Member Impacts—Since the facility began operations, farmer-members have benefited from additional revenues from the value-added activity and the increased price of soybeans in the region. Potential medium- to long-term financial benefits associated with their investment in the cooperative are expected. One board member said, "Members have increased their incomes by cutting out the middleman." Directors also took considerable pride in creating a locally-owned soybean processing cooperative in a market dominated by large and powerful multinational companies and regional cooperatives. Members are also proud of their role in helping to establish soybean processing in the region.

The participants of the two groups did not explicitly identify negative effects of SDSP on its members, but some concerns were raised. Directors were concerned about the difficulty of dealing with the classic dichotomy between the desire of members for short-term profits versus the cooperative's need for long-term investments. The board was also concerned about maintaining cooperative principles, such as attempting to treat all members equally and/or equitably. In particular, treatment of members unable to meet their delivery requirements is a concern. Furthermore, the directors expressed concerns about disagreements regarding SDSP's future development path and remaining competitive in an industry dominated by a few large firms. Minnesota directors were disappointed that the impact of the processing facility on soybean prices did not extend much beyond the immediate vicinity of Volga. Others were concerned about complaints about congestion, noise, and dust from nearby residents.

Needs for Assistance

The two focus group meetings conducted with the board of directors and community leaders indicated that the cooperative's greatest needs are technical assistance. In particular, the board wanted help with business planning, legal issues, strategic planning and engineering and technology. In contrast, the highest priority for the community members was for technical assistance in the area of market research.

Directors saw the need for board training while the community group's top educational priority was leadership development. Finally, in terms of research needs, both groups were interested in different facets of successful cooperative development. The board wanted research on factors associated with the successful development and operation of cooperatives. The community leaders identified case studies of successful cooperatives as their highest priority.

Lessons Learned

A primary lesson learned from studying SDSP is the great need among farmers and other community members for information about the development of businesses, irrespective of whether the business is a cooperative or some other structure. A second lesson is that the development of SDSP would not have been possible without a core group of very active individuals committed to achieving their goal of developing a soybean processing facility. This core group was assisted in critical ways by a much larger group of "behind-the-scenes" individuals committed to the same goal.

A third observation is that neither agricultural producers nor local citizens are necessarily committed to the concept of a cooperative per sé. Instead, farmers appear to be increasingly aware that some control of their destiny can only be achieved through involvement in business activities beyond the farm gate.

Cooperatives are a convenient vehicle for achieving this goal. Local citizens appear to be indifferent as to whether a business attracted to their community is a cooperative. They are unfamiliar with the distinctions, from the perspective of rural development, between a cooperative and other business forms.

Opportunities and Challenges

Directors and community leaders identified a number of challenges and opportunities for SDSP. Both considered remaining profitable in a market dominated by large IOFs and regional cooperatives was the most important challenge for the cooperative. While SDSP has generated profits during its first 2 years of operation, it is too early to judge its medium and long-term success. Ongoing involvement and vigilance by the cooperative's members and management will be critical to its continued success. This includes understanding regional, national, and global market conditions for soybeans and soy-based products. One aspect of that assessment may be to analyze the feasibility of developing and operating a production facility for refining SDSP's current intermediary products, i.e., oil, meal, and hulls.

A second, related, challenge or opportunity is the potential expansion of the railway line owned by the Dakota-Minnesota and Eastern (DM&E) Railroad Company. This rail link provides SDSP with direct access to the Mississippi River and indirect access to Western States and Pacific Rim markets. The impetus for the expansion of the railroad is to transport coal from Wyoming to eastern U.S. markets. The expansion could also provide improved access to national and international markets for SDSP. Currently, the DM&E line transports 52 percent of the products produced by SDSP. The expansion of the railroad system is controversial because economic development benefits are being pitted against potentially adverse environmental impacts and increased rail

traffic in communities along the railroad. In a controversial move, SDSP management and board of directors voted in favor of the railroad expansion in September 1998.

Summary and Conclusions

SDSP is an important example of a value-added agricultural cooperative. It was only developed in recent years and so far has been financially successful. The SDSP case shows that with resolve and group effort, agricultural producers can develop and run a successful value-added agricultural enterprise without relying on Federal subsidies.

Background research on and discussions with individuals involved with the development and operation of the SDSP cooperative indicate that a number of conditions must be in place to develop and operate a successful NGC. An important necessary, but not sufficient condition for the successful development and operation of an NGC is the existence of dedicated leadership associated with the cooperative and the community. A further requirement for a successful cooperative is the availability of financial resources and the willingness to invest these resources in the endeavor.

A discussion on resource requirements needed for developing and operating a successful cooperative inevitably leads a concern about the limitations of these resources in rural areas. Another limiting factor in developing NGCs is that these cooperatives must be operated at an efficient scale, which implies some minimum geographical coverage. These limitations suggest that the number of successful value-added cooperatives may be limited by the amount of financial and human capital available for investment in these activities. Nevertheless, discussions with cooperative leaders associated with SDSP suggest that these limits have not been reached yet. On the contrary, SDSP's preliminary success appears to have motivated some of its leaders to become involved with other value-added endeavors in the region, and has inspired others to seek financial opportunities by participating in NGC activities.

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The Dakota Growers Pasta Company

Gary Goreham, Robert P. King,
Evert Van der Sluis, and Kimberly A. Zeuli

Introduction

The Dakota Growers Pasta Company (DGPC) headquartered at Carrington, ND, was selected as a case study because it exemplifies one of a growing number of successful new generation cooperatives (NGC) emerging in the Northern Great Plains States.

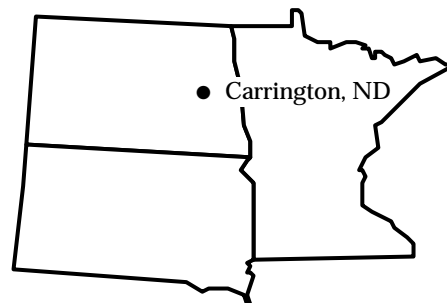
DGPC is recognized as one of the most successful NGCs. Further, it has moved beyond the startup phase and has established a solid track record of accomplishments. Finally, DGPC is an example of the types of activities that have proven most successful for NGCs. Thus far, NGCs appear to do best when they develop and/or exploit a niche value-added market. DGPC, capitalizing on the growing popularity of pasta in the United States, has successfully established itself in this expanding niche market.

Socio-Economic Profile

Carrington is the county seat of Foster County, ND, and is equidistant (about 130 miles) from the State's three largest cities—Bismarck, Fargo, and Grand Forks (Figure 1). Carrington is in the south central part of the Nation's primary durum wheat production area.

Carrington's population peaked at 2,641 in 1980, and has been in decline since. Between 1986 and 1995 the population of Foster County declined by 11 percent. North Dakota's population declined by 4 percent over the same

Figure 1—Location of Carrington, ND

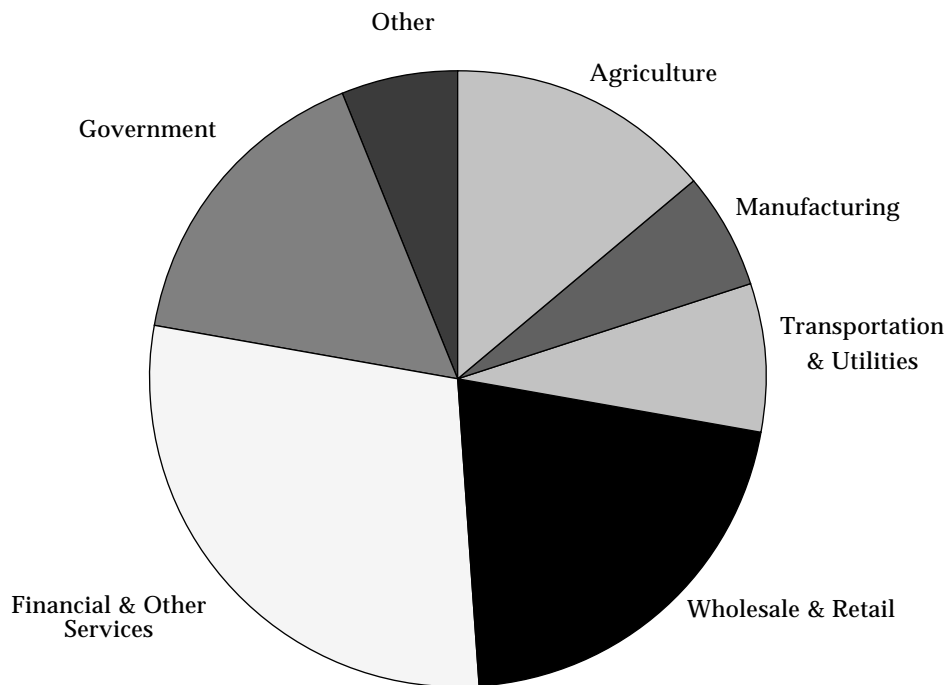


period. The county's population is overwhelmingly white (99 percent), relatively elderly (21 percent are older than 65 compared to 13 percent for the Nation as a whole) and poorly educated (31 percent of those over 25 have no high school diploma). Its 2 percent unemployment is low but 17 percent of the population is living in poverty. These conditions are similar to those in the area served by South Dakota Soybean Processors and WACCO (see chapters 6 and 8) and point to a large percentage of working poor in Foster County (U.S. Census).

In 1985, Carrington's per capita income (\$11,422) was slightly lower than that of Foster County or North Dakota (\$13,235, and \$12,365, respectively). Per capita personal income in Foster County was stagnant during the first half of the 1990s but grew by 4 percent over the same period for North Dakota as a whole (Bureau of Economic Analysis).

Sources of earnings in Foster County are illustrated in Figure 2, which shows that the pillars of the economy are financial and other services, wholesale/retail establishments, government, and agriculture. Together, these four sectors account for 80 percent of total earnings. Foster County has had a relatively weak manufacturing sector. However, the impact of DGPC on the manufacturing sector is apparent from the data. Prior to 1994, manufacturing gener-

Figure 2—Sources of Earnings, Foster County Average 1991-95



ated less than \$500,000 in earnings per year. Since then it has generated about \$5 million per year and accounts for up to 15 percent of total earnings in the county.

Over the past 10 years, agriculture in Foster County accounted for more than 30 percent of total earnings in some years (1990, 1991) and generated a net loss in others (1988, 1995). Clearly, agriculture is a highly volatile segment of the county's economy. Agricultural production in Foster County is dominated by crops—81 percent of total agricultural sales in 1992. As with the rest of the country, the number of farms in the county has been falling sharply (from 377 in 1987 to 297 in 1992, a drop of 21 percent). This rapid decline may have provided additional encouragement for the formation of the DGPC (Census of Agriculture).

In 1996 North Dakota was the country's leading producer of durum wheat, which is the primary input for DGPC. The State produced 69 percent of all durum wheat in the U.S. (NDAS, 1997) but Foster County ranked only 42nd (out of 53 counties) in durum wheat production in North Dakota (North Dakota Agricultural Statistics). Durum acreage in the county, in recent years has been sharply curtailed because of serious wheat disease problems in the region. The pasta plant is credited with boosting local durum prices.

Bill Patrie of the North Dakota Association of Rural Electric Cooperatives observed, "The pasta plant is having a profound effect on durum prices and the economic vitality of the area—it's putting more money in the pockets of growers." Previously, most farmers had been selling their wheat at the Minneapolis Grain Exchange. Other mills, primarily in Minnesota, would then purchase the wheat. The pasta plant is not, however, the only factor contributing to higher durum prices. Small durum harvests from 1993 to the present, coupled with growing demand for pasta, have also helped drive durum prices higher. The 1997 harvest was the smallest since 1993, and the fourth smallest in the past 15 years.

Dakota Growers Pasta Company

Dakota Growers mills its members' durum wheat into semolina, which is used to produce pasta products. The cooperative is one of a few fully integrated pasta manufacturers in the U.S.—most manufacturers purchase their semolina from other milling companies. Table 1 summarizes the timeline for the development of DGPC. Creation of DGPC took several years, from 1990 when the first interim board of directors was appointed, until November 1993 when pasta production began. During this time the prospectus for interested growers was developed, farmers and civic leaders were educated about the project, and needed capital was raised.

NDPC was developed under what might be considered nearly ideal conditions for cooperative development. The cooperative received substantial assistance from the State of North Dakota for its feasibility and marketing studies. In addition, DGPC received assistance from the North Dakota Association of Rural Electric Cooperatives. "The rural electric cooperatives decided they were in the best position to take action, so [they] adopted a new economic development philosophy that emphasized rural development through cooperative development," reported Dennis Hill, vice-president and general manager of the North Dakota Association of Rural Electric Cooperatives. The rural electric cooperatives created a formal rural development program (Vision 2000 eco-

Table 1—History of the Dakota Growers Pasta Company

Date	Event
late 1980s	Inception of the idea for the DGPC
1990	Formation of DGPC initial board of directors
January 1991	Equity drive for DGPC; 28 meetings were held across North Dakota resulting in 1,040 durum producers investing \$12.5 million
Fall 1991	North Dakota Agricultural Products Utilization Commission provided feasibility study grant (\$55,000) and marketing grant (\$150,000)
June 1992	Sufficient capital raised to proceed with DGPC; qualified for loan from St. Paul Bank of Cooperatives (\$20.9 million) and the Bank of North Dakota (\$6.5 million)
March 1992	Solicitation for proposals for the site of the DGPC manufacturing plant
1992	Carrington, ND prepares proposal to locate the manufacturing plant in its industrial park
June 1992	Selection of Carrington, ND as the site for the manufacturing plant
September 1992	Construction of the \$40 million, 110,000 sq. ft. manufacturing plant
November 1993	Begin production of pasta at the manufacturing plant
1995	Distribution center established in Fargo, ND
February 1996	New stock offering of 2 million shares to raise funds for \$5 million expansion
December 1996	\$20.5 million expansion of the plant facilities to double its milling and processing capacities
August 1997	New pasta lines added
January 1998	DGPC acquires Primo Piatto, Inc.

Sources: Abbe 1996; Bailey 1995; Cobb 1992; "Cooperative-based food plants..." 1996; Demetrakakes 1994; "Food Processing..." 1997; Johnson 1998; Keller and Patrico 1998; Krapp 1992; "Primo Piatto..." 1998; Sorensen 1997; Stefanson et al. 1995.

Table 2—Financial Data for Dakota Growers Pasta Company (in \$1,000)

	1994	1995	1996	1997	1998
Revenue	\$20,008	\$41,239	\$50,494	\$70,702	\$119,621
Net Income (Deficit)	(\$207)	\$1,436	\$2,618	\$6,929	\$9,374
Total Assets	\$45,215	\$47,842	\$49,894	\$68,739	\$124,537
Long-term Debt	\$28,477	\$24,822	\$18,860	\$27,131	\$66,056
Working Capital	\$2,001	\$2,400	\$8,184	\$6,329	\$22,813
Members' Investments	\$12,107	\$13,497	\$24,866	\$29,956	\$36,875
Patronage Dividends per Share Distributed	—	\$0.20	\$0.32	\$0.65	\$1.00

Source: U.S. Securities and Exchange Commission, 1998.

conomic development plan) and hired Bill Patrie and Jack Piela to administer it. This program provided DGPC with substantial organizational and facilitation assistance.

The cooperative receives all of its durum from its 1,085 members, most of whom reside in North Dakota (1,039), with 60 from Foster County. Other members reside in Minnesota (38) or Montana (8). Wheat comes from these States in rough proportion to member numbers. In 1997 DGPC had 274 full-time employees, 21 part-time workers, and hired temporary workers on an as-needed basis (U.S. Securities and Exchange Commission).

DGPC's facilities are considered to be state-of-the-art. Their mill turns durum wheat into high-quality semolina, durum flour, and millfeed. The semolina is processed in the company's pasta plant in the same complex. The plant uses advanced Italian pasta processing equipment and computer control systems, including ultra-high-temperature drying to create a consistent, high-quality product. In 1996, 3.5 million bushels of durum were processed by DGPC into semolina (68 percent), durum flour (8 percent), and millfeed (25 percent) (Walen). In the same year the plant produced 118.8 millions pounds of pasta in more than 60 shapes.

In 1996, mill capacity more than doubled to about 7 million bushels of wheat per year (18,500 bushels per day). Two new pasta lines were added in 1997, so the plant now contains six pasta production lines, three long goods and three short goods lines. A fourth short goods line added 30 million pounds of capacity in 1998.

Overall, DGPC has done well financially (Table 2). It has been profitable in every year other than its start-up year and has expanded quite significantly. Net revenues and sales climbed steadily, as have net incomes and patronage dividends. Since organizing, the cooperative has paid out \$2.735 million to its farmer-members.

Research Findings

Interviews were conducted with a DGPC board member, the manager, a county Extension Service staff member, and an NDSU Experiment Station member involved in community development efforts. Focus groups were conducted

with seven DGPC farmer members and nonmembers, 12 community leaders, and six heads of community agencies and institutions affected by locating the manufacturing plant in Carrington.

Participation Decision—Research identified several reasons for joining (or refusing to join) Dakota Growers Pasta Company. A primary reason cited was for “the good of the community.” Several farmers said they purchased shares in hopes that their support would help Carrington be selected as the site for the pasta plant. Self-interest, the desire to add value to farm products and duplicate the success of other cooperatives, also played an important role in the decision to invest. However, one participant noted that while the required investment was not inconsequential, the expected cash flows from membership were small relative to the total cash flows for his operation. Several others concurred that they would not have been comfortable making an investment so large that it would have jeopardized their financial position had the cooperative failed. Finally, some invested because of their confidence in the quality of the management team and the reliability of the feasibility statement.

Reasons not to purchase shares focused on “financial constraints” and concerns about the riskiness of this venture. All participants agreed that the cooperative’s success had exceeded expectations, but that was not clear at the beginning. Some farmers cited an inability to raise durum on their farms. Wheat disease problems in the area have made it very difficult for farmers to raise durum that meets the standards of the plant. Even those who belong or have belonged to the cooperative have not been able to deliver durum they produced. Rather, they have had to purchase durum from other sources to meet their delivery obligations. Participants also noted that they might prefer to diversify their investments by purchasing stock in companies outside of the agricultural sector.

Community Impacts—Comments across the focus groups and interviews suggested the most important community impact of DGPC was the psychological boost it gave Carrington. The development of DGPC led to an “attitude change,” “a more positive attitude toward the community,” and “improved citizen attitudes” in Carrington. It is important to remember the historical context within which DGPC developed. The 1980s were a particularly difficult economic period for agriculture, particularly in the High Plains. Indeed, at that time one proposal was for the High Plains to be cleared of people and turned into a Buffalo Commons. Thus, the development of DGPC comes on the heels of a very demoralizing time for Carrington and its psychological impact appears to have been enormous.

Most participants also identified the improved tax base and more and better jobs as important benefits of the pasta plant. Again the context of the development of DGPC should be borne in mind. Population in the city, county, and State was declining through the 1980s and most of the 1990s. Thus, the arrival of a business that provides a significant number of jobs and tax dollars was a very welcome change.

The participants identified the “cost of the incentive package” granted to DGPC and demands on the city’s infrastructure as the most important negative features of the plant. Carrington offered DGPC significant tax breaks to induce them to locate the plant in their town. Subsequently, existing businesses increased their demands for similar treatment. The manager of DGPC does not feel that the plant has put undue stress on the city’s infrastructure. He said that a pasta plant was a very community-friendly project.

A pasta plant durum mill is probably the easiest thing to satisfy from an infrastructure standpoint of any industry out there. We don't require water. Most of our processing is recycled, including water and all that. What we put down the sewer really comes out of the bathroom or washer. We really don't have a lot to hurt the taxes or infrastructure. Water use is very minimal compared to the size of facility. We didn't cause them a lot of pain for the infrastructure.

Others felt the plant created a housing shortage in Carrington and undesirable socio-demographic changes. Specific socio-demographic problems included increases in crime (traffic violations and drug offenses), a more transient population, and more congestion in town.

Member and Nonmember Impacts—The most important impact of DGPC on members has been the economic boost given by the cash distributions received from DGPC. As the manager said, "Really it's pretty simple. All we're trying to do is add value to farmers' crops. Our philosophy is to pay market price and add value, and try to stabilize or add value to the total crop. That's what value-added co-ops are all about."

Other positive impacts for members include a market for durum wheat, research on durum wheat, and advice from the cooperative. The existence of DGPC also benefited nonmembers by improving the market for durum wheat (non-members access DGPC's grain marketing pool). Other positive impacts for nonmembers included more jobs in the region. Both members and nonmembers feel that they benefit from the general community revitalization that DGPC helped spawn.

DGPC also provided its members with some intangible benefits such education about the food industry. As DGPC's manager said to a member, "It's not that I don't want to take [your durum], it's that you don't want to eat it." So it's an education process for your members. "Why don't we want your poor-quality grain because you don't want to eat it on your supper table. What we run through here is going to end up on somebody's table."

The only negative impacts of DGPC on members and nonmembers were pressures for higher wages driven by the tighter labor market and the socio-demographic changes.

Needs for Assistance

As in other case studies, technical assistance seems to be the strongest need in Carrington. All of the focus groups wanted help with strategic planning and market research. Financial management and risk assessment and management were also identified as important technical assistance needs. A key board member identified "communications" as an important technical assistance need for the investors/members. He said, "I personally went into the NDSU Communications Department and got a lot of help from them in putting together presentations on the project. To my knowledge, that really is not readily available anywhere else except at a rather severe cost."

Finally, the manager cited the need for ongoing mediation services. "We could probably use [outside experts] more than anything as a mediator. We have a big expansion project. We've gone through several expansions.

Sometimes we run into a little difficulty with the local politicians when it comes to tax abatements. This is a service you should offer the businesses when they come in.”

There was less consensus about the educational offerings needed by the community and participants in DGPC. The highest priority for community leaders included education about public finance options and on community economics. For leaders of public agencies in Carrington, the top educational priority was in leadership development. Members and nonmembers identified leadership development, risk assessment and management, and board of director training as key educational needs. The manager of DGPC identified general workforce training as critically important. “To me it’s still the ongoing problem with a manufacturing plant, adequate training at start-up without importing all your people. Importing people costs too much money. That’s one area where we need help, and it’s still a problem. It’s still the lack of proper training of all our employees. It’s still an on-the-job training issue. We need classroom and on-the-job training. You never have enough trainers to go around.”

Research needs were somewhat less strongly felt in Carrington than were technical assistance and education needs. The most consistently identified research need focused on critical community economic issues. Other high-priority issues included research into assessing the economic returns of cooperatives and into what factors are critical for the success of a cooperative.

Lessons Learned

Several lessons emerged from this case study that are applicable to initiating new generation cooperative projects and to community-cooperative relationships. First, locating an NGC manufacturing plant in a community produces a variety of positive and negative spin-offs. For the most part, community and cooperative officials agree about what these spin-offs are, but do not always share the same perceptions on their relative importance. Cooperation between community and cooperative officials may likely be strongest when they focus on their shared interests.

Second, strong, hard-working, visionary leadership is essential both to initiate the cooperative venture and to attract the manufacturing plant to one’s community. Both parties must be prepared to negotiate points of concern and to use their resources to accomplish results.

Third, farmers join new generation cooperatives for a variety of reasons, only one of which is for personal financial gain. They also consider the manufacturing plant’s impact on their community. When deciding whether to join an NGC, farmers need information from trusted resources, including the cooperative’s officials and leaders and neighbors in their own communities.

Opportunities and Challenges

This case study examined the views of farmers, agency heads, and community leaders in the Carrington area about DGPC. The interviewees and focus group participants clearly have a positive view of DGPC, even those who do not currently belong to it. They also have a realistic and sophisticated understanding of both the positive and negative impacts of the cooperative on individuals and the community.

The primary opportunity and challenge facing the DGPC is to continue its high level of performance. The manager identified expansion as an important

component of the cooperative's strategic plan. DGPC has, in fact, expanded substantially in its relatively brief existence. Some expansion has been funded by additional direct investments in new plant and equipment. Recent expansion has been through acquisition of former competitors. As DGPC expands from a single site operation to multiple sites in several States, the organizational demands increase significantly. In addition, expansion increases the potential for frictions within the cooperative that are driven by the different strategic objectives of various groups.

Summary and Conclusions

Residents of Carrington and members of DGPC have a common interest in assuring the financial vitality of the cooperative because all benefit from its presence. DGPC benefits from Carrington being demographically, economically, and infrastructurally strong because it relies on the city and the region for its labor force and other needs. Although city leaders, agency officials, and cooperative officials and members expressed a strong "self-help" belief, they also want research, educational programming, and technical assistance that may be available.

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Western Areas Cities and Counties Cooperative

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Linda Jacobson, Frayne Olson and Anne Reynolds

Introduction

Local governments, especially those in rural areas, are facing a number of challenges. In many rural areas, particularly in the Great Plains, population levels are stagnant or shrinking and the average age of residents is increasing rapidly. Agriculture, long the economic bulwark for many rural areas, is undergoing a structural transformation toward fewer, larger, more vertically integrated, and much more technologically sophisticated units.

For rural areas this consolidation means there are fewer potential local leaders, fewer children for the schools, and consumers who often bypass local stores. Resistance to increases in taxes, particularly the property taxes upon which many local governments depend, has created significant fiscal constraints. It is within this context that the Western Areas Cities and Counties Cooperative (WACCO), headquartered in Fergus Falls, MN, has developed. WACCO is a cooperative organization owned by the governments of 7 counties (Becker, Clay, Douglas, Grant, Stevens, Traverse and Wilkin) and 18 towns (Barnesville, Battle Lake, Breckenridge, Detroit Lakes, Elbow Lake, Fergus Falls, Glyndon, Hancock, Hawley, Henning, Lake Park, Moorhead, Morris, New York Mills, Pelican Rapids, Perham, Rothsay, and Wheaton) in western Minnesota (Figure 1).

WACCO is a model that could have widespread application throughout the United States, especially in rural areas. Local governments nationwide are

Figure 1—Wacco Service Area



facing increasingly complex demands as activities previously been done by Federal or State Governments are being transferred to the local level. Citizens are also demanding more efficient delivery of services.

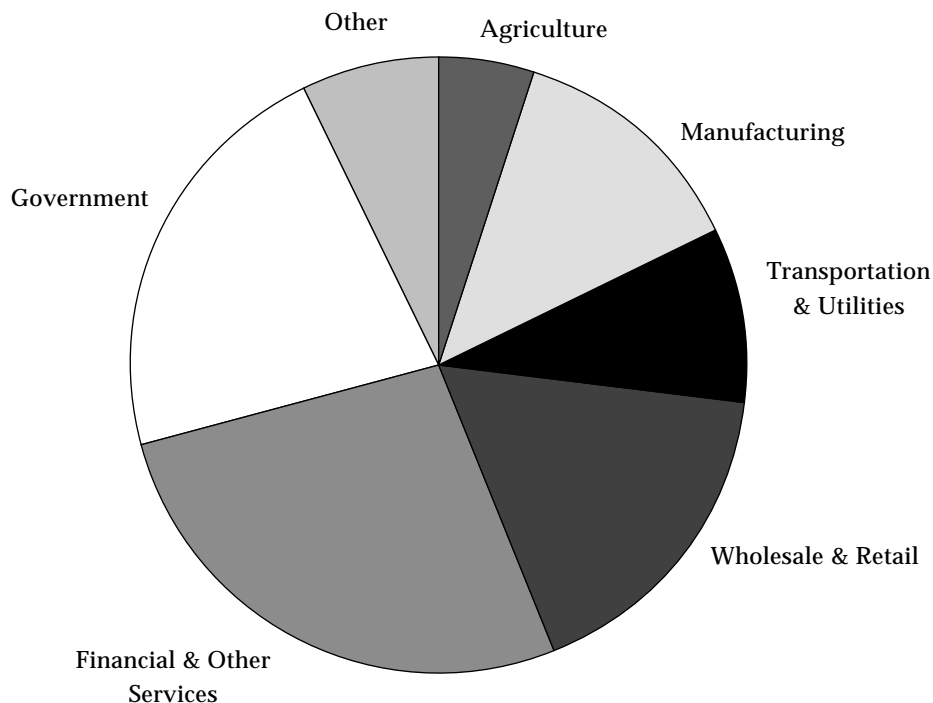
A common response to similar pressures in the private sector has been to consolidate into fewer and larger firms. There has been no parallel trend in the public sector. Indeed, pride of place remains strong in most of the U.S. and resistance would likely be quite vigorous if two counties, for example, proposed a merger. WACCO is a model that can allow local units of government to realize the economies of scale associated with consolidation without the real and emotional costs that come with disbanding existing local governmental structures.

Socio-Economic Profile

Figure 2 illustrates the major sources of earnings for the area. West central Minnesota has a diversified economy with financial and other services being the largest source of earnings, followed by government and wholesale/retail trade. The area has a significant tourism industry, particularly in its northern counties, which accounts, in part, for the importance of the service industry.

Agriculture is a more important sector for WACCO than suggested by Figure 2. Agriculture has accounted for as much as 13 percent of total earnings

Figure 2— **Source of Earnings, WACCO Area Average 1991-95**



for the area in some years (1987, 1990) and for as little as 2 percent in others (1993). In recent years, flooding (1993 and 1995) and plant disease (wheat smut) have buffeted the region's agriculture. Agriculture in the area is well diversified. About half of total farm receipts come from livestock (46 percent) and half from crops (54 percent).

Unemployment levels tend to be low (5.4 percent in 1990) but poverty levels high (15.2 percent of the population fell below the poverty level in 1990) in the counties that are members of WACCO. These figures suggest an abundance of low-wage employment and significant numbers of the working poor. This pattern is consistent with an economy heavily dependent upon service sector jobs, typical of many tourism-dependent areas. On a more positive note, per capita income in the counties served by WACCO grew robustly, at between 4 and 5.5 percent, from 1985 to 1995. Income growth was more rapid in counties that contain regional trading centers (Alexandria, Fergus Falls, Moorhead, and Detroit Lakes) than in more rural counties.

The total population in the eight counties served by WACCO changed little between 1986 and 1995, growing by just 3 percent. By contrast, the State of Minnesota grew by 10 percent. Counties with regional trading centers and/or significant tourism potential (Becker, Clay, Douglas and Otter Tail Counties) saw their populations grow slightly, while the more rural counties had significant population declines. The age profile of the counties served by WACCO indicates a population somewhat older than average. Seventeen percent are older than 65. Again counties with regional centers or tourism attractions tend to have lower percentages of older people than do the more rural and agricultural counties. The people in this part of Minnesota are overwhelmingly of European descent (97 percent white) with Native Americans comprising the largest minority group (2 percent).

Background on WACCO

WACCO has several functions. One of its initial goals was to purchase municipal supplies and services (e.g., snow plow blades, road salt, office equipment and supplies) at reduced prices. By aggregating the orders of many governmental entities and acting as a broker with competing suppliers, WACCO has generated significant savings for its members.

WACCO also has facilitated equipment sharing among member governments. It has created an inventory of equipment available in each of its member communities. The individual members negotiate rental terms among themselves. In addition, the cooperative itself has leased specialized equipment, such as a stump grinder, that is moved from community to community as need arises. Equipment sharing has been less important than initially planned. Nevertheless, one member reported that the money he saved his local government by renting a rarely used piece of equipment from a neighboring municipality, rather than buying a new unit, more than paid for their membership in WACCO for the year. Thus, this remains an important activity for the cooperative.

WACCO's third function is to be an information clearinghouse. First, if one local government has a question about a rule or regulation, WACCO will call the relevant agency, find the answer, and share the response with other members of the cooperative through its newsletter. Second, the cooperative provides a valuable forum for networking between the members. Local governments can tap into the expertise that exists within the cooperative and improve

coordination between equivalent units of local government in different localities (police, public works, etc.). For example, if one local government has a person on its staff with particular expertise in a given computer program, investigative technique, or operation of a piece of equipment, others in the area can draw from that expertise. While the benefits from this function are difficult to quantify, members of the cooperative identify this as one of the key benefits from participating in WACCO.

Finally, after WACCO was created, it developed a critical role in the area of training. This function was not initially identified as something the cooperative would do but has, over time, become one of its primary activities.

The idea of having local units of government collaborate with each other to cut costs and improve services arose from positive experiences three cities in the region had with sharing a building inspector and some equipment. In the early 1990s, these city managers had the foresight to try to expand their small-scale efforts. They brought the mayors of their respective cities into the discussion and were encouraged by them to explore a more formal cooperative venture with other area city managers and mayors. Meetings were conducted throughout the region and sufficient interest was expressed that a decision was made to seek grant funding to help implement this idea.

A grant was written on behalf of the cities by the Lake Country Service Cooperative (LCSC). At the time, LCSC was known as the Educational Cooperative Service Unit (ECSU). ECSUs exist throughout Minnesota and are a cooperative that serves area school districts with purchasing and in-service training. The grant was submitted to West Central Initiative, an area foundation. The grant was approved in June 1993 and provided funding over a 3-year, startup period.

LCSC became the fiscal agent for WACCO, provided the cooperative with office space, and gave it access to support services. The grant covered 100 percent of the anticipated cost of operations in the first year, two-thirds of the costs in the second year, and one-third in the third year. When the grant was received, the cities involved agreed to locate the WACCO office in Fergus Falls because of the city's central location and the availability of space and support from LCSC.

The organization and structure of the cooperative have evolved over time. The operations of WACCO are governed by a joint powers agreement between the participating local governments, which was drafted in 1993. This joint powers agreement was initially signed by the 11 cities that started the cooperative. Within a year, seven more municipalities had joined WACCO and several area counties sought membership. To include the counties, the joint powers agreement was amended and additional funds were sought from and granted by West Central Initiative.

WACCO is governed by a board of directors, which meets quarterly. It is composed of elected officials from each member government, and an executive committee. The executive committee meets monthly, is composed of city managers and department heads, and has responsibility for overseeing the operations of WACCO. Beyond the initial grant funding, WACCO generates the funds needed to sustain it from annual membership fees. The membership fee is based on the population of the county or city plus a fixed fee. WACCO currently charges \$250 plus an assessment based on the population size. Cities of less than 1,000 pay \$500 per year, those with between 1,001 and 5,000 pay \$1,000 per year, and those with more than 5,000 pay \$1,500 per year. Counties pay \$0.20 per capita each year. In September 1993, WACCO hired its first and

only manager, which was a critical event for the cooperative. The executive committee was looking for and found a self-starting individual. What the manager lacked in experience with cooperatives and local government, she made up for with extensive customer service experience, a degree in marketing and management, and a willingness to listen and learn.

One of the keys to the cooperative's success was the way its operation began. It organized a series of events that involved department heads and line workers in different departments from the various cities involved in WACCO. For example, the cooperative invited all the public works employees in the region to a steak-fry at the public works offices of one of the members. People involved in these departments met their colleagues from other towns, often for the first time, and shared information, ideas, and concerns. The cooperative, by creating this forum for exchange and quickly acting on the ideas generated in these meetings, established itself as a place to which members could go with needs or ideas for collaborative activities. The line staff and department heads quickly saw the cooperative was not a threat to their well-being.

WACCO, because it listened to the line staff, identified training as an additional function it could perform. It has been so successful in this area that during 1997, the cooperative organized 147 workshops, seminars, and training sessions that are estimated to have saved their local governments \$500,000. These savings are based on what the local governments would have paid for equivalent training elsewhere. Since, for the most part, equivalent training would be available only in the Minneapolis-St. Paul metro area, by using WACCO training programs, participants are saving mileage, meals, and lodging. Total savings are, therefore, calculated by multiplying the number of participants in a given program by the expected travel and per diem costs.

Members have noted that keys to WACCO's success are the broad participation of different departments, the positive attitude of the board and management, and the manager's ability to work with a variety of people on a wide variety of topics.

Research Findings

Three focus groups (one with directors, another with members of WACCO and a third with members of the community) and two interviews (with the manager and the city administrator who championed the creation of WACCO) were held to gauge the impact of WACCO. The community focus group included non-member users of WACCO, a representative of West Central Initiative, which provided the seed capital for the cooperative's creation, and an individual from the Lake Country Service Cooperative, which wrote the grant to the West Central Initiative Foundation and provided WACCO's first office.

Community Impacts—For the most part, WACCO is invisible to the public in its service area. At one level this is a problem because it makes it more difficult to maintain support from local politicians for the cooperative. If people are not clamoring for a service, in part because they are unaware of it and its impact, it is easy to cut it out of your budget. On the other hand, the low visibility has a positive side in that WACCO is helping local governments reduce costs, improve services, and maintain local autonomy without engendering significant turf battles.

Two negative community impacts associated with WACCO were identified. The first is friction that developed between member and non-member

governments (a “we” versus “them” attitude). The second is the breakdown in relations between WACCO and LCSC (which now offers some competing programs). The separation of LCSC and WACCO in 1996 was driven by institutional changes. LCSC was authorized by the State of Minnesota to offer services similar to those offered by WACCO, creating a conflict of interest. Some members of the cooperative view the resulting competition as healthy (creating more choices for members and providing market discipline) while others feel that an opportunity for collaboration was missed and additional overhead created.

Impact on WACCO Members—One impact noted by all three focus groups was an increase in the availability of training. Associated with this is the sense that members had more suggestions for the training programs offered through WACCO than they would have had from other sources. Many members also identified cost savings such as training programs and enhanced buying power for local governments as a key impact.

Participants value the informal networking and the improved communications that now exist among the members of the cooperative. For instance, during the spring of 1997 one of the members of WACCO, the City of Breckenridge, MN, experienced a devastating flood. WACCO was instrumental in mobilizing public works departments from throughout its service area to supply trucks, personnel, and other needed resources to help Breckenridge cope with the situation. It is unlikely that the response would have been so well coordinated and rapid if WACCO had not existed. Because of WACCO, the members of the public works departments throughout the region were now on a first-name basis with their colleagues in Breckenridge. Finally, WACCO is being recognized at State and regional levels as a valuable model for others. This has given members a great sense of pride and accomplishment.

Relatively few negative impacts of WACCO were identified. There was some concern that the membership fees were a burden on smaller municipalities, especially those that don't often use WACCO. Also cited was the constant need for education about the benefits of WACCO because membership on the city councils and county boards change. The costs of being a member of WACCO are explicit, while the benefits are sometimes more intangible (expenses foregone, networking, etc.).

Dealing with peak demand for specialized pieces of equipment was another concern. Specifically, they noted that a particular piece of equipment that is owned by one WACCO member is sometimes loaned to another member when the owner needs it. This has, apparently, caused some frictions within the membership. Finally, sometimes working through WACCO is slower than working individually. For example, when an item is ordered through the cooperative, the manager asks if other communities are interested in purchasing this item, seeks bids, evaluates alternative suppliers and makes the purchase. This requires somewhat more advanced planning by members but usually results in significant cost savings.

Impact on Non-Members—Even non-members identified benefits received from WACCO. For instance, they regularly participate in the training programs offered (at a slightly higher price) without incurring the annual membership fee. In addition, WACCO has helped non-members find other training resources.

Negative impacts on non-members included their lack of access to the cooperative's resources, having to pay more for services received through WACCO, and reduced networking possibilities.

Needs for Assistance

In contrast to the other case studies, the highest priority identified by participants in the WACCO focus groups was research into the factors critical to the success of cooperatives. This reflects the fact that WACCO is no longer a startup venture. At this stage, defining standard operating procedures and making management practices routine are of critical importance. WACCO has achieved great success in its relatively short history. The challenge ahead is how to maintain and build on its successes.

WACCO is also in the first years of operation without grant funding. As a result, it recognizes the importance of identifying and emulating procedures that have proven successful in other cooperatives. Other research topics identified as particularly important focused on assessing the returns generated by cooperatives and on when a cooperative is the best organizational form to use.

Educational priorities among WACCO case study participants are somewhat more difficult to summarize. Some people felt quite strongly about some issues (conflict resolution and the role of public finance in developing a cooperative) that were not necessarily broadly felt priorities. Most participants said leadership development was a key educational priority. In the area of technical assistance, the WACCO case study participants wanted assistance focused on improving current operations and preparing for the future with an emphasis on strategic planning and financial management.

Lessons Learned

Perhaps the primary lessons learned from WACCO are that small rural governments are interdependent, can provide better services by collaborating (sharing personnel, expertise, equipment, training expenses), and can save taxpayers money at the same time. WACCO's experience also showed the importance of hiring the right person as manager. In this case, it was critical for the manager to talk with and gain the respect of multiple levels of the member governments. It was important that the mayor, city administrator, department heads, and line staff all support the cooperative. This support was cultivated by good communications between the manager and members and by an effort to highlight and publicize the successes of the collaborative effort.

However, WACCO has learned that innovation is not always looked upon as a positive thing. Not all eligible local governments in the area are members of WACCO and some are outspoken in their opposition. Some cite the cost of a membership compared with the benefits. Some of their coolness toward WACCO may be driven by old turf battles, a history of competition, and fear of new approaches to organizing local governmental services. There is also concern that the competition between WACCO and LCSC may fracture the membership and make it more difficult to provide the services the cooperative currently provides.

Opportunities and Challenges

One study participant said the opportunities for WACCO were "endless." Specific opportunities identified were:

- expanding the selection of goods and services offered by the cooperative,
- improving the marketing of the cooperative's goods and services to smaller units of government,
- coordinating technology decisions in the region (e.g. coordinating computer hardware and software decisions across local units of government),
- expanding group purchasing efforts (particularly in energy markets with the pending deregulation of gas and electric markets),
- preparing the area for the global economy (trade, tourism, etc.), and
- helping local units of government cope with increasingly complex issues

Perhaps the greatest opportunity for WACCO over the coming years, however, is to continue to serve as an example of how collaboration between local governments can make a critical difference.

The cooperative also faces a number of challenges in coming years. One is in the area of funding. Many of the benefits created by the cooperative are in the form of cost savings—training that would have cost more if the local government had to send its employees to a larger metropolitan area. These are soft savings in the sense that the local government may simply have decided not to send anyone for the training. As a result, WACCO must educate the political decision-makers, who set the funding that determines the cooperative's fiscal health, about the benefits of WACCO. Because of the constant turnover in local governments, WACCO's educational or marketing efforts must be continuous.

Some of the cooperative's benefits are partially quantifiable (dollars of training costs saved and price discounts received through group purchases) and some are not (the networking benefits created by the cooperative). The cooperative may need to consider changing its funding structure from one based largely on annual dues to a cost-plus-margin pricing of its educational offerings and group purchasing efforts.

A second significant challenge facing the cooperative is shifting from the entrepreneurial/growth to a more mature phase. In its initial stages, the focus was on identifying the needs of its members and figuring out how to satisfy them. As it matures, the cooperative will need to keep in close contact with its members while developing standard operating procedures to deal with routine tasks, delegating responsibilities, and retaining their energy and creativity in seeking out new products and services for its members.

Summary and Conclusions

WACCO is a very valuable model for local governments. The cooperative's members have discovered a mechanism for improving the quality of needed goods and services while cutting costs. In an era of stagnant or declining tax dollars and increasing demand for public services, WACCO could become a model for local governments around the country. One of the key features of WACCO is that it has achieved its results without undermining local control and identity.

WACCO is not without its problems, most of which are internal. It must continue to be seen as an innovative, customer-responsive, servant of its members while maturing as an institution. Making the transition from startup to mature business is often difficult. WACCO's very committed board and manager should ease this transition.

Lessons and Challenges

Robert P. King

As the 21st century begins, the U.S. food system is undergoing structural changes that will have far-reaching impacts for farmers, agribusiness firms, rural communities, and consumers. These changes are being driven by the development of new technologies and institutions, shifts in the economic environment, globalization, and a move away from the basic premises that have underlain agricultural policy since the 1930s.

Cooperatives, which have played a key role in the evolution of the food system throughout this century, are increasingly viewed as an institutional tool for enhancing farm profitability and fostering the development of rural communities in this new setting.

Some food systems can be traced to the beginning of this century:

- the steady erosion of the farm share of the food dollar as farmers rely more on purchased supplies and consumers demand food products that require more value added processing beyond the farm gate,
- size economies in the manufacturing of farm inputs and in food processing, and
- a decline in the population of rural communities.

Other important trends have more recent origins:

- increased vertical coordination as firms in the food system strive for increased efficiency through supply chain management,
- the transformation of traditional commodity markets into a collection of niche markets that require identity preservation and new logistics systems,
- new plant and animal varieties that may shift more of the value creation in the food system back to the farm, as genetic traits are substituted for processing,
- the emergence of biotechnology firms as an increasingly powerful force in the food system, and
- increased exposure to price risk for farmers due to globalization of markets and changes in farm policy.

Together, these trends pose new threats and offer new opportunities for farmers and rural communities.

These case studies describe the process of cooperative development and the linkages between cooperatives and rural communities. The value of these case studies comes from the details they present. Each is a unique story that can provide valuable insights to others, who may learn from similarities between their own situation and that of a case cooperative or from significant contrasts between situations. But general lessons also emerge from these studies for farmers, rural communities, and those who work with cooperatives and their members in support of the cooperative development process.

The Cooperative Development Process

The primary focus for the case studies was on new cooperative enterprises and the people involved in organizing them. Each case study team collected information on the history of the cooperative enterprise, challenges facing its members, and external resources that contributed to the development process. The following lessons and challenges are common to many, if not all, of the case studies.

Starting a Cooperative Takes Time—The fundamental business idea that is the rationale for a particular cooperative enterprise often originates from an individual or a small group. For example, the idea of forming Northeast Missouri Grain Processors grew out of discussions among farmers on the board of the Missouri Corn Growers Association. The idea for WACCO emerged from the positive experiences several city managers had in sharing people and equipment. In other instances, the idea for a cooperative enterprise may originate in a public sector study designed to identify economic development activities, as was the case with Dakota Growers Pasta Company and South Dakota Soybean Processors.

Regardless of how it originates, developing an idea for cooperative enterprise into an ongoing business requires an enormous commitment of time and energy by a small number of people. This is best exemplified by the Northeast Missouri Grain Processors case, which describes a group in the midst of its membership and equity drive. Getting to that point took 4 years. During that time, a small group of organizers faced unexpected legal challenges, the stress of a difficult site selection process, and uncertainty over whether the cooperative would be able to raise enough equity from producers to build its facility. Members of that group took time to visit other cooperatives, to meet with consultants and attorneys, and to organize and conduct informational meetings.

Each of the other cooperatives studied has similar stories. A few key people made contributions to the development of a cooperative enterprise that far exceeded the personal benefits they enjoyed. Establishing a core group of people who are willing to make such contributions is a key challenge at the outset of any cooperative development process.

Strong Community Links Are Key—Each cooperative described in this monograph contributes significantly to its community and to the larger region in which it operates. Each also benefits greatly from the support and infrastructure provided by its local community and region.

The relationship between Dakota Growers Pasta Company and its base community, Carrington, ND, illustrates this point especially well. Dakota Growers has been a key element in Carrington's economic revitalization, bringing new jobs and investment into the community. At the same time, Carrington has contributed significantly to the success of Dakota Growers, not only through tax incentives but also through community efforts to improve the physical, social, and economic infrastructure that have helped this new venture succeed.

The cooperative-community linkage is also evident at the regional level. The direct economic benefits of Dakota Growers accrue to farmers throughout North Dakota and neighboring States, and the support provided by State agencies and North Dakota State University was instrumental to the development of Dakota Growers. In this case, the cooperative and its community recognized and fostered a win-win situation.

The importance of links between the cooperative and its community is evident in each of the case studies. The challenge for new cooperative ventures

is to recognize the importance of their relationship to the broader community and understand how it can be used to mutual advantage by linking their business idea to the community's economic vitality.

New Ventures Create Conflicts—Three of the cooperatives profiled are New Generation Cooperatives (NGCs) with defined membership and delivery rights—Dakota Growers, South Dakota Soybean Processors, and Northeast Missouri Grain Processors. When such an enterprise is being established, conflicts can arise because value-added processing of one product may adversely affect producers of another.

For example, in the case of Northeast Missouri Grain Processors, there was concern that increased corn demand for ethanol production would increase feed prices for livestock producers. Once a cooperative has been established and is successful, as in the case of Dakota Growers, there can be conflicts between members and non-members as access to the cooperative becomes increasingly expensive and valuable.

Each of these three NGCs also experienced conflicts with the local community in connection with site selection, tax incentives, and impacts on local infrastructure. For example, there was considerable conflict over site selection by Northeast Missouri Grain Processors and by Dakota Growers, and over a second round of tax breaks for Dakota Growers when their success prompted an expansion.

Finally, conflicts can develop between new cooperative ventures and the organizations that helped create them. WACCO was established with the help of the Lake Country Service Cooperative (LCSC), but LCSC was later given authority to offer similar services and now the two organizations compete.

Managing conflict is an important challenge for new cooperative ventures. Because cooperatives exist to serve their members, conflicts with non-members are almost inevitable. The level of conflict can be reduced, though, by identifying and developing positive externalities created by the cooperative enterprise.

Governance Structures, Member Involvement—Cooperatives are user-owned and user-controlled. They exist to support and enhance the independent business operations of individual members. The significant capital requirements for membership in NGCs can provide strong incentives for member involvement. Maintaining a high level of involvement can be more difficult in an older, open-membership cooperative, such as Farmers Co-op Association in Keota, IA. That case study illustrates how strong board and management leadership in combination with dialog through general membership meetings can foster member involvement when important, controversial decisions must be made.

Understanding and maintaining appropriate roles for the cooperative board and its management can also be a challenge. Dakota Growers has a very effective manager. He oversees plant operations with a large workforce and has managed to enforce high quality standards on grain delivered by members at a time when disease problems have made it difficult to produce high quality grain. There was no evidence that the board had tried to interfere with the manager's efforts to maintain quality standards. In this case, the board and management appear to have developed an effective division of responsibilities.

Developing and maintaining member involvement and establishing appropriate governance structures are important for cooperatives as they are established and as they evolve into mature organizations. With renewed interest in cooperative solutions to economic problems, many farmers are faced with

the challenge of relearning how to work together in a cooperative enterprise and integrating activities and opportunities associated with that enterprise into their own individual farming operations.

One Effort Leads to Others—Farmers and rural communities are learning by doing as they create new cooperative businesses. Often the lessons learned in establishing one cooperative enterprise can be applied to another. For example, AgriOils LLC was completing an oilseed processing plant adjacent to the Dakota Growers pasta plant in Carrington when the case study team made their visit.

AgriOils will benefit from that close proximity and from the knowledge and experience base Dakota Growers has helped create in the local community and with area farmers. Similarly, lessons learned in the establishment of Northeast Missouri Grain Processors will make it easier for other NGCs to be formed in Missouri. Legal issues have been clarified, and farmers and individuals who help support cooperative development have developed knowledge and skills that can be transferred to new situations.

Learning from and building on past experience is an important challenge for the cooperative community. This sharing can happen locally or it can extend to the regional level. Many of the profiled cooperatives were linked through site visits, information exchanges, or use of the same consultants. Many new cooperative ventures are not part of the traditional cooperative community based on State and national cooperative organizations and affiliation with regional cooperatives. An informal community has emerged, though, and that community is likely to strengthen.

Cooperatives and Rural Communities

These case studies also focused on linkages between cooperatives and rural communities. Because cooperatives are established to benefit members in a geographically bounded community, they can be an important tool for community economic development. General lessons and challenges emerged from examination of the relationships between the case study cooperatives and their communities.

Development Revitalizes Communities—The new cooperative enterprises profiled in this study all had positive impacts on their local communities. This was, perhaps, most evident in Carrington, where the Dakota Growers pasta plant created more than 300 new jobs. This, in turn, revitalized the community's retail trade, fostered growth in support sectors such as construction, and gave local residents a new sense of optimism about the future of their community.

Such impacts are also evident, however, in Volga, Keota, Macon, and the area served by WACCO. In Volga, for example, the South Dakota Soybean Processors plant brought 70 new jobs into the community, spurred ancillary economic activity, and strengthened the local tax base. In Keota, although only eight producers participated in the swine program, the introduction of this new enterprise made it possible to build a modern new feed mill that benefits many other livestock producers and strengthens local grain prices.

Cooperative development is an attractive tool for local economic development because cooperatives add value to local production and those net proceeds to members of the local community. Perhaps the most important chal-

lenge for new cooperative and for communities that want to foster cooperative development is in establishing relationships that help exploit the synergies surrounding new economic activity.

Benefits Difficult To Quantify—While the benefits of cooperative development are evident, putting a dollar value on them is difficult, especially before operations start. In Carrington, Volga, and Macon, local communities were asked to provide tax incentives and new services at a time when the timing and size of benefit flows to the community were largely unknown. In the cases of Carrington and Volga, some of the costs of cooperative enterprise development were higher than expected, including investment and maintenance costs for basic infrastructure and greatly increased demand for other local services not directly linked to the cooperative. Members of the community in Carrington noted that, due to the structure of tax incentives provided to Dakota Growers, the city was forced to bear the cost of infrastructure development before enjoying an eventual increase in tax revenues from the new plant.

Even well after operations are under way, the benefits of a cooperative can be difficult for many to perceive. WACCO, for example, has helped reduce costs and improve the quality of local government services while helping communities maintain local autonomy, but it is essentially invisible to local citizens. Further, because the benefits generated by WACCO are primarily costs that are avoided and not revenue streams, which would be more obvious, the cooperative must be aggressive in educating an ever-changing set of political decision-makers about its value.

Because the relationship between cooperatives and their communities is so important, cooperatives face the challenge of clearly documenting and describing the benefits they create, not just for their members but also for the broader community. At the same time, local community leaders need to carefully assess not only the benefits but also the costs of fostering this form of new business development.

Communities Can Benefit—Farmers form cooperatives when they can accomplish things by working together that they couldn't if they worked alone. At a time when increased concentration of economic activity, decreasing farm numbers, and declining rural populations jeopardize their viability and autonomy, this is also a valuable lesson for rural communities.

The WACCO case provides the clearest evidence of what communities can accomplish by working together. By giving up some autonomy in purchasing and training decisions, the member communities in WACCO gain cost savings that allow them to shift limited tax revenues and staff resources to addressing problems of greatest concern locally. In the process, they increase their chances of being able to remain independent local governments in the future.

The other case studies point to other opportunities for communities to work together. As noted earlier, the site selection process for new processing plants is often very divisive. When the membership base for a cooperative is geographically dispersed, both costs and benefits may accrue disproportionately to the community selected as a plant site. There may be a need for new institutions that can more equitably distribute economic impacts of new business development that affects an entire region.

Finding the right balance between collaboration and independence is a key challenge for rural communities. The cooperative form of business organization can be a good mechanism for farmers to find that balance, and it may prove to be an equally effective tool for rural communities.

Infrastructure Supports Development

These case studies were conducted to identify technical assistance, educational programming, and research needed to support cooperative development. General lessons and challenges emerged from the cases for individuals and organizations that provide resources and expertise to cooperative enterprises.

Technical Assistance—Transforming the idea for a cooperative enterprise from dream to reality takes outside assistance as well as extraordinary effort by the cooperative organizers. This outside assistance may come from government agencies, technical and business consultants, attorneys, lenders, State cooperative councils, and universities. Choosing the right technical assistance providers, coordinating their efforts, and sorting through conflicting advice can be challenging for new cooperatives.

The case studies suggest that technical assistance needs evolve as the cooperative enterprise develops. Those involved in the establishment of Northeast Missouri Grain Processors identified forecasting the economic impacts of the cooperative and strategic planning as key technical assistance needs. For the new South Dakota Soybean Processors the list of key technical assistance needs included strategic planning, business planning, engineering and technology assistance, help with legal issues, and market research. Dakota Growers had clearly moved out of the establishment phase, so key technical assistance needs shifted to financial management and risk assessment, communications, and mediation to resolve disputes with the community.

Educational Programming—These needs also evolve with the cooperative enterprise. Participants in the Northeast Missouri Grain Processors and Dakota Growers cases identified programming on principles of community economic development as a key need during the establishment phase of a cooperative. Participants in the Dakota Growers case also identified a need for educational programs on public finance for community leaders. Later in the life of a cooperative enterprise, board training, assessing and managing risk, and leadership development may emerge as key issues for educational programming.

Research—Three priorities for research emerged from the case studies. First, there was almost universal interest among study participants in research on critical success factors for cooperative enterprises. They saw value both in systematic comparisons across a set of similar cooperatives and in individual case studies on successful cooperatives. They also noted the importance of assessing not only the success of the enterprise itself but also its impact on the broader community.

Participants in the Northeast Missouri Grain Processors case identified a priority for research. As the first NGC in Missouri, it worked with consultants and advisors from several other States and quickly learned that there are significant differences across States in laws affecting cooperatives. This led to misunderstandings, confusion, and delays. As the new wave of cooperative development gains momentum in other regions, similar problems are likely to occur. Systematic comparison and analysis of differences in the legal environment for cooperative development could be of considerable value not only for those directly involved in cooperative development but also for legislators interested in strengthening the institutional infrastructure for economic development.

Finally, participants also expressed strong interest in research that would assess the economic returns of cooperatives, both to members and to the community. Assessment of returns from NGCs is difficult for at least two reasons. First, these businesses have relatively short track records upon which to judge their effectiveness. Second, these cooperatives are significantly different in form

compared with to traditional cooperatives so communities and members have more difficulty determining their expected returns from investing in these businesses.

Conclusions

Agriculture and rural communities face significant challenges as new technologies, institutions, and market forces transform the U.S. food system. Cooperatives are tools that farmers and rural communities use to influence and respond to this changing environment. Depending on its scope of operations, a cooperative's community may be defined on a local, regional, national, or international level. These case studies clearly show that successful cooperatives are closely linked to the communities where their members live and work.

As they have for the past 150 years, cooperatives remain a valuable tool for independent entities to come together to achieve or maintain a competitive position. Given the dramatic changes that are occurring in the food sector and in the public sector, the cooperatives profiled in this study are likely to be important and valuable models for others around this country and beyond.

U.S. Department of Agriculture

Rural Business–Cooperative Service

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Rural Business–Cooperative Service (RBS) provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The cooperative segment of RBS (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs. RBS also publishes research and educational materials and issues *Rural Cooperatives* magazine.

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