

Traditional versus New Generation Cooperatives

Murray Fulton

The rise of New Generation Cooperatives (NGCs) during the past decade is an important and fascinating phenomenon. NGCs are an important phenomenon both in their own right – it is estimated that more than \$2 billion has been invested in these co-ops by 1999 – and because they are affecting the traditional co-ops in some fundamental ways. They are fascinating because they illustrate clearly the internal and external pressures co-ops face as organizations and how they have responded to these pressures.

This chapter explores the differences and similarities between NGCs and traditional co-ops. The basic argument put forward is that NGCs have evolved as a new organizational form because of forces that are both internal and external to the co-operative. The external forces have to do with the restructuring of agriculture that is occurring at the end of the 20th century, while the internal forces have to do with the need for co-ops to provide different incentive structures for their members' dealings with the co-op.

What is a New Generation Cooperative?

The term New Generation Co-operative is the name given to the roughly 200 value-added processing, closed-membership cooperatives that have emerged, first in North Dakota and Minnesota and more recently in neighboring states and provinces,

during the past decade. The new cooperatives are being formed by producers involved in emerging niche markets, such as bison, Tilapia fish, and edible beans, as well as by producers of traditional commodities, such as dairy, corn, and durum wheat.

NGCs should perhaps be called the Newest Generation Cooperatives. In both Canada and the US, agricultural and rural cooperatives have emerged in waves. The first wave occurred during the early part of this century when agriculture and agricultural markets were in their infancy. Farmers formed co-ops in reaction to the oligopolistic practices of input suppliers and farm product handlers and processors.

A second wave of co-op formation occurred during the 1930s and 1940s, largely in response to a lack of service provision – whether it be in the financial, retailing, telephone, or power generation sectors – that occurred as investor-owned firms turned their attention to more lucrative urban markets. The latest wave of co-ops – the NGCs – represent the efforts of a younger generation of farmers to tackle the challenges of deregulated agricultural markets and specialized market niches.

The reasons behind the formation of the NGCs are as diverse as the markets in which they operate. In some cases the need for market information and coordination appears to be the driving force; in others the impetus seems to be a need to restructure existing markets to provide producers an increasing share of the consumers' food dollar. In addition, the impact of NGCs extends beyond the farm gate, as people in rural

communities look to NGCs as a development strategy that will boost rural disposable income, employment, and population (James).

The value-added focus of NGCs represent a departure from the broad objectives of commodity and input marketing of many older established cooperatives. Rather than acting as clearinghouses for products, NGCs are closed membership cooperatives restricted to accepting a predetermined amount of a specific product. Tradable delivery rights require members to deliver a certain amount of product to the cooperative and require the cooperative to accept this amount.

More specifically, two elements distinguish NGCs from traditional cooperatives: delivery shares and restricted membership. The different membership and financial structure stems from the processing focus of the NGCs. The efficient capacity level of the plant determines the amount of product that members can deliver to the processing facility. Membership is restricted to those producers who first purchase delivery rights to the processing facility.

To allocate the right of delivery among members and to raise capital, the co-op sells delivery shares. Each share entitles a member to deliver one unit of farm product (e.g., one bushel of durum, one bison) to the cooperative. The purchase of a share also obligates a member to deliver one unit of the farm product. The membership shares thus create a contract between members and the cooperative that stipulates the amount the

member must deliver to the co-op and the amount the co-op must purchase (subject to the product meeting quality requirements).

All members need not hold the same number of shares, although there is often an upper and lower limit to the number of shares a member can own. Producers must fulfill contract obligations with their own product or purchase product elsewhere for delivery to the plant. In the event that producers are unable or unwilling to meet their contract requirements, the cooperative purchases the required amount and charges the cost against the members' account. The members' dividends reflect the charge.

The initial price of each share is determined by taking the total amount of capital the cooperative wishes to raise for start-up and dividing it by the number of units of farm product that can be absorbed by the processing facility. In general, the NGCs have followed recommendations to raise between 30 and 50 percent of their total capital requirements as member equity. Equity drives are held to solicit support and sign-up investor-members.

Remaining capital requirements are met through debt equity or the issue of preferred shares. Preferred shares enable contributions to be obtained from the community or other interested parties. Holders of preferred shares do not have voting rights and there is often a limit on the amount of interest paid on these stocks (for example, in North Dakota the limit is legislated at eight percent).

Because members have financed a substantial portion of the capital of the cooperative up-front with an equity infusion, a large portion of the earnings generated by the cooperative can be returned to the members at the end of the year. At this time, net earnings are calculated by taking the total revenue generated from the sale of the value-added product and subtracting the total expenses of the cooperative. Allowance for a contingency fund is also made. The earnings are then divided among members in proportion to the amount of raw product they deliver.

After the initial equity drive, shares can be traded, pending board approval. The share prices in the operation period reflect the returns members expect to receive from the cooperative. Future expansion of the cooperative is financed in the same way as the cooperative was originally financed; that is, members must invest their money up-front through the purchase of delivery shares. North Dakota Pasta Growers is an excellent example of a co-op that has pursued this expansion strategy (Rustebakke).

Table 1 provides a comparison of NGCs with traditional co-ops using a classification developed by Cook (1995). He distinguishes four distinct kinds of co-ops (only three are shown in Table 1): Farm Credit System; Utility Co-ops, Local and

TABLE 1 CATEGORIZATION OF AGRICULTURAL CO-OPS

Type of Co-op	Description
<i>Traditional Co-ops</i>	
Rural Utility Co-ops	Includes rural electric (formed in 1936) and rural telephone (formed in 1949) co-ops. Formed to provide a service that was missing because of high cost of serving a low density consumer base.
Nourse I – Local Co-ops	Multi-purpose – input retailing and commodity assembly. Operate in a relatively small geographical area. Formed to provide competition to a spatial monopoly (the so-called “competitive yardstick”) or to provide missing services.
Nourse II –Regional Co-ops	Multifunctional – perform a combination of input procurement, service provision and/or marketing. Many integrate forward or backward beyond the first handler or wholesale level. Structure – federated, centralized, or both. Formed to provide a “competitive yardstick” or to achieve economies of scale.
Sapiro I – Bargaining Co-ops	Formed to enhance margins or ensure markets. Most often found where the agricultural product is perishable.
Sapiro II – Marketing Co-ops	Form of forward vertical integration. May be single or multiple commodity. Formed to increase margins or to avoid market power. May involve processing of the commodity, as well as development of brand names.
New Generation Co-op (Sapiro III)	Single commodity and processing focus, rather than geographical focus. Formed to obtain market information and co-ordination efficiencies or to provide producers with profits from downstream activities. Well-specified delivery rights.

Source: Cook (1995) and Harris et al.

ops formed largely in response to market failures such as lack of competition or lack of service, NGCs appear to form in large part because farmers want an organizational vehicle with which to invest in other parts of the agricultural value chain. Traditional co-

¹ Nourse refers to University of Chicago professor E.G. Nourse who wrote extensively on how the public policy role of cooperatives was to create a “competitive yardstick.” Sapiro refers to A. Sapiro, a California lawyer, who promoted co-ops as a way of farmers obtaining bargaining power in the agricultural system. For an overview of the importance of Nourse and Sapiro to the development of co-operative thought in the U.S., see Torgerson, et al. and the references therein.

ops are usually focused in a geographical area; NGCs are typically focused around a single commodity (which may or may not have a geographical focus – for instance, the bison processing co-op in New Rockport N.D. has members from Canada and from as far away as Florida). And, as will be discussed later, NGCs differ from traditional co-ops in terms of the incentives received by members in their dealings with the co-op.

In summary, NGCs differ substantially from traditional co-op in terms of structural elements and the motivation for formation. NGCs have emerged as a new co-op form because of the constellation of several forces, some of which are internal to the co-op and some of which are external. The next section examines these forces and how they have influenced the structure of NGCs.

Cooperative Transformation: Internal and External Pressures

The formation of NGCs in the latter part of the 20th Century is the outcome of a complex set of pressures and forces that are both internal and external to cooperatives. The external forces revolve around the changes occurring in the larger agricultural industry of which cooperatives are part. The internal forces hinge on the incentives created within cooperative organizations and the effect these incentives have on the actions of co-op members and management. The external pressures are examined first.

External Pressures

Agriculture is in the process of a major transformation, a process that several observers have called industrialization. The industrialization of agriculture has been defined as "the application of modern industrial manufacturing, production, procurement, distribution, and coordination concepts to the food and industrial product chain" (Boehlje, p. 30). Table 2 compares traditional agriculture with the new industrialized agriculture. Key elements of this transformation are that markets are less commodity driven and more product driven; production is more capital intensive; decisions made by firms at all levels of the market are increasingly interdependent; price and production risk are replaced with risks surrounding relationships and food health and safety; and information becomes a prime source of control and power. These changes have resulted in increased vertical coordination and integration; in addition, firms are more and more being asked to deliver products of a consistent quality at the appropriate time (Boehlje, Drabenstott).

TABLE 2 COMPARISON OF TRADITIONAL AGRICULTURE WITH THE ‘NEW’ AGRICULTURE

Traditional Agriculture	‘New Agriculture’
<ul style="list-style-type: none"> • Commodities; spot markets • Farms carry out many activities • Product chain stages seen as independent • Price and production risk • Concerns about monopoly pricing • Money and assets prime source of control 	<ul style="list-style-type: none"> • Differentiated products; negotiation; contracts • Specialization; separation of production stages • Focus on a system; stages seen as interdependent • Relationship risk; food health and safety • Concerns about access to information • Information as prime source of control

Another part of the global transformation is a major change in the role of government. Government is withdrawing from agriculture, whether it is in the removal of price support programs and production based subsidies, the deregulation of industries such as grain transportation, or the withdrawal from agricultural research. There is also a loss of support for marketing boards and government marketing agencies. The view that agriculture deserves special treatment no longer holds sway.

The changing structure of agriculture has important implications for farmers. In traditional agriculture, farm production was seen as a distinct stage in the product chain and farmers could concentrate exclusively on farm production. The movement towards specialized production and much greater integration with input suppliers or processors means farmers can no longer view themselves as independent. For instance, the emergence of niche markets not only creates a need for specialized inputs, both by

processors and by farmers, it also demands that decisions at the farm input level, farm production level, and processing level be coordinated to achieve economies of scale. As long as these activities are independent, all players fail to achieve an optimal scale.

The emergence of greater contracting and vertical integration also raises questions regarding control and power. Farmers can expect to increasingly give up control over farm level production decisions. Because of the information possessed by agribusiness firms about product quality and its importance further down the food chain, these firms are likely to have the power to set contract terms. With greater contracting, farmers also face new risks, such as the possibility that a processor, for instance, will change the contract terms once farm production has occurred. This risk increases as the assets needed for agricultural production become more and more specific to a particular product.

TABLE 3 COMPARISON OF TRADITIONAL AGRICULTURE WITH TRADITIONAL CO-OPS

Traditional Agriculture	Traditional Co-ops
<ul style="list-style-type: none"> • Commodities; spot markets • Farms carry out many activities • Product chain stages seen as independent • Price and production risk • Concerns about monopoly pricing • Money and assets prime source of control 	<ul style="list-style-type: none"> • Sell generic products to members on demand • Multi-purpose co-ops serving diverse members • Co-ops concentrated near the farm level • Major supporters of government price supports • ‘Competitive yardstick’; co-ops source of countervailing power • Investment in physical capital; little investment in intellectual capital

Historically, farmers have used cooperatives to provide control over marketing and input supply. The agricultural co-operatives that farmers formed in the past had the same characteristics as the larger agriculture system of which they were part. Table 3 compares the structure of traditional agriculture (see Table 2) with traditional co-ops. Traditional co-ops adopted structural features that mirrored those found in the larger agricultural environment.² For instance, spot markets and generic commodities characterized traditional agriculture; correspondingly the traditional co-operative sold generic products to members on demand (i.e., whenever farmers wanted them).

² The notion that organizations might mirror the larger environment of which they are part is an important element of a contingency view of management. Kast and Rosenzweig argue that there should be congruence between the organization and its environment. Indeed, they view the primary role of management as the maximization or optimization of this congruence.

Historically, farms carried out many activities – mixed farms were common until roughly 30 years ago, and even specialization (an example would be a move to produce only pigs) meant carrying out multiple functions (in the case of hogs, for instance, the standard model until recently was the farrow-to-finish operation). Co-ops mirrored this multiple activity, serving a diverse membership by offering a wide variety of crop inputs and handling or processing a wide variety of farm products.

A common feature of agricultural co-ops is that they are concentrated at the input supply and first-handler level (Rogers and Marion). This pattern is consistent with a view of the world in which the product chain stages in agriculture are conceived as independent – precisely the way in which traditional agriculture was viewed. At the farm production level, price and output risk were major concerns – and government addressed these concerns with policies directed specifically at these problems. Typically co-ops were important supporters of these policies.

Finally, market power – derived mostly from the wealth and physical assets owned by large IOFs – was a concern in traditional agriculture. Co-operatives were one of the mechanisms by which greater competition was introduced into the market. Indeed, the cooperative has often been billed as the “competitive yardstick” (Cotterill, Torgerson et al.). To provide countervailing power, co-ops themselves used “bricks and mortar,” investing heavily in storage, handling and processing facilities.

TABLE 4 COMPARISON OF ‘NEW’ AGRICULTURE WITH ‘NEW’ CO-OPS

‘New’ Agriculture	‘New’ Co-ops
• Differentiated products; negotiation; contracts	• Contractual relationship with members
• Specialization; separation of production stages	• Greater specialization; focus on niche products
• Focus on a system; stages seen as interdependent	• Device for farmers to network with rest of system
• Relationship risk; food health and safety	• Vehicle for farmers to avoid relationship risk
• Concerns about access to information	• More attention paid to providing farmers with information
• Information as prime source of control	• More attention paid to using the information farmers possess

If co-operatives mirror the larger structure of which they are part, then the changes in agriculture that are currently underway mean co-operatives will also change, and in a very specific way. Table 4 presents the structural elements of the new agriculture and asks the question: What will be the corresponding structure of co-operatives? The answer is that co-operatives will begin to adopt elements such as contracting, they will begin to focus on very specific products and they will increasingly engage in activities at numerous levels of the supply chain.

These elements have already begun to emerge in the form of NGCs. Indeed, the structural form adopted by the NGC is well suited to the new “industrialized” agriculture. The vertical integration inherent in the co-operative form allows for a more systems focus, rather than a focus on each separate link in the chain. And the up-front purchase of delivery shares provides a high degree of commitment by both the co-op and each

member, thus reducing concerns about opportunistic behavior and relationship risk. In short, NGCs can be seen in part as an evolutionary adaptation to the changing environment of which they are part. NGCs differ from traditional co-ops in precisely those ways that are required to better operate in an industrialized agriculture.

Internal Pressures

An evolutionary view of cooperatives also sheds light on the internal pressures facing a co-operative. Cooperatives are not static entities. Indeed, cooperatives are often thought to move through a life cycle. It is suggested, for instance, that worker cooperatives will either fail as productive units or be converted into other forms, such as investor-owned firms (Ben-Ner, Miyazaki). The new organizational structure represented by NGCs is a response to pressures that develop during this life cycle.

As Porter and Scully have pointed out, the co-operative structure results in several inefficiencies in performance when compared to investor-owned firms (IOFs). These inefficiencies arise because property rights in co-operatives are not well defined and because co-operatives are often formed to pursue multiple objectives. These problems are classified as follows (see Cook for a more detailed description).

- The Free-Rider Problem – Since the economic benefits of co-operatives arise through the use of the co-operative, little incentive exists for members to invest in the co-operative. The result is that members will only invest as much as is required for them to patronize the co-operative. This reluctance by members to invest directly in their co-operative means co-operatives are expected to rely more heavily on debt than IOFs and/or to be chronically short of capital (Knoeber and Baumer).

- The Horizon Problem – Co-operatives are prone to inefficiencies because of the limited patronage horizon of co-operative members. Since members can only receive a return on their investment through patronage refunds when they actually use the co-operative, they will tend to support activities that maximize short-term rather than long-term returns. This problem is not present in IOFs, because the trading of shares allows the expected future earnings of long-term investments to be reflected in the value of the company (Porter and Scully).
- The Control Problem – Because co-operative shares are not traded on the open market, co-operative share values cannot be used as a convenient performance gage; the result is that operational inefficiencies can go unobserved. As well, widely dispersed ownership, especially in large co-operatives, provides individual members with few incentives to monitor the performance of their co-operative.
- Portfolio Problem – The lack of tradability in co-op shares also means members cannot adjust their investment portfolio to reflect their own risk preferences. Consequently, members will attempt to direct the activities of the co-operative in a direction that better matches their own risk-return trade-off.
- Influence Costs Problem – The dual role of the member as owner and user creates specific problems for management. Because of this dual role, co-operatives often have substantial latitude in the decisions they can make. This wide latitude can lead to attempts by members to steer the co-operative to positions that will benefit them personally. The need to ensure member support means managers must constantly work to build consensus, an activity that is often costly – particularly when members have highly diverse interests. Capital constraints and the horizon problem also make management more difficult (Cook 1994).

These property right problems tend to emerge during a specific phase of a cooperative's development. As discussed earlier, traditional cooperatives emerged in response to market failures. Cooperatives that were able to successfully compete against IOFs continued in operation. As these cooperatives matured, they increasingly faced the property rights problems outlined above (Cook 1995).

As an example, in the start-up phase and often for some period beyond, the free-rider problem was often lessened by the presence of a strong ideological commitment of the members to the co-operative (Fulton 1999). In a similar fashion, the horizon, portfolio, and control problems were often reduced by member education and training (Fulton 1996).

However, as the co-ops grow older and larger and members became more diverse and adopt new attitudes (often a result of generational change), the property rights issues become more salient. Cook (1995) argues that much of the organizational adaptation that has occurred within traditional co-ops – examples include seeking outside equity from the public trading of co-op shares to joint ventures with IOFs – result from pressures arising from property right problems.

The rise of the NGCs can be seen in part as an institutional adaptation to these property right problems. The property rights in a NGC are much better defined than in a traditional co-op, largely because of tradable delivery rights that can fluctuate in value. The result is that the free rider problem, the horizon problem and the portfolio problem are largely eliminated. While the control and influence costs remain an issue, they too are reduced, largely because of the narrow focus – the processing of a specific commodity – of the co-op (Cook 1995).

TABLE 5 CONTINUUM OF ORGANIZATION PURPOSES

Organization	IOFs	NGCs	Marketing Co-ops	Farm Supply Co-ops	Consumer Co-ops	Kibbutz
Purpose	Profits			Service		Life Meaning

Source: Torgerson et al.

NGCs not only embody a different set of property rights than do traditional co-ops, they also represent a very different relationship between the members and the co-op. As Torgerson et al. discuss, economic organizations have at least three purposes: making profits, providing services, and realizing meaning. Table 5 illustrates how cooperative organizations can be found at different locations along a continuum of purpose. Unlike traditional co-ops that are largely located around the purpose of service, NGCs tend to be closer to the profit end. In short, NGCs represent an attempt by members to preserve a stream of earnings over a period of time, rather than simply providing a service.

Closely related to the idea of cooperative purpose is the notion that in order to operate effectively in a market co-ops must differentiate themselves from IOFs in some fashion. The greater the degree to which co-ops are able to differentiate themselves, the greater is the member commitment (Fulton, 1999).

In their development stage, traditional co-operatives often relied on ideology as a differentiating feature. At its most basic level, co-operative ideology is a belief that doing business with an organization owned and controlled by farmers is preferable to doing

business with an organization owned by external investors. While not all farmers subscribed to this belief, enough did to ensure that the co-operative had a core membership.

Over time, cooperative ideology has waned. Part of the reason for this waning is that cooperatives were unable to meet the expectations of members, thus causing disappointment and dissatisfaction with the cooperative model. Cooperative ideology also waned because subsequent generations of co-op members did not share the same philosophical viewpoint as the original founders, a viewpoint that was developed in large part because of the market failures the founders experienced.

The result of a waning ideology is that co-ops are no longer differentiated from IOFs in the minds of members. To compensate, co-ops must develop new ways of differentiating themselves from their IOF counterparts.

One way for a co-op to differentiate itself is to move into a new product area with little or no competition from IOFs. NGCs can be understood at least in part as an example of this type of strategy. Many NGCs are situated in niche markets, such as bison, specialty cheeses, edible beans, and sugar beets in which there is little IOF involvement (in the case of sugar beets, for instance, the NGCs replaced the previous IOFs when the IOFs left the area) (Harris et al.).

Another way of differentiating members from non-members is to find some factor that can provide a stronger linkage between the co-operative and the welfare and well-

being of its members. In consumer co-operatives and credit unions, attempts can be made to focus on the lifestyle or values of a specific group of consumers. One example of this focus is Recreational Equipment Incorporated (REI), an outdoor and wilderness supply co-op that stresses environmental sustainability. A second example is VanCity Credit Union, the largest credit union in Canada. Part of its success can be linked to its attention to community issues, including the provision of micro-credit.

For agricultural co-operatives, attempts to develop linkages via life-style or values are much more difficult. A dimension that NGCs have exploited is the degree to which farmers wish to participate in profits from a value-added enterprise versus simply receiving a price for their product. For a variety of reasons, not all farmers will have the same preference for becoming involved in value-added ownership. One reason is risk. While investment in value-added enterprises should provide greater expected returns than simply selling a product on a spot market or through a contract, the investment is also considerably more risky. To that extent that farmers differ in their preference for risk, farmers will thus differ in their preference for investment versus simply receiving a price for the product they produce. This in turn can result in a preference for co-ops versus IOFs (Zeuli and King). Farmers may also differ in their ability to access capital or in their discount rates. Either of these factors could also result in differential preferences for investment in a value-added enterprises (via a cooperative) versus market transactions with an IOF.

A the key feature of NGCs is the ability of members to participate directly in the returns generated by a value-added enterprise. Evidence shows that NGC members tend to view themselves as being in the food system rather than farming and see NGC co-op investment as having higher returns and higher risk than other investment opportunities (Cobia). Thus, NGCs seem to have found a way in which members are differentiated from non-members.

Summary and Discussion

The main conclusion of this paper is that NGCs can be viewed as the outcome of a process by which cooperatives and farmer-owned enterprises adapt to changing internal and external environments. The external environment in which co-ops operate has changed as the industrialization of agriculture has proceeded. Internally, a reduction in traditional member commitment and the increasing importance of well-defined property rights to structure members' behavior have resulted in a need for new structural features.

In both cases, the changes have created an advantage for the NGC structure. For instance, the need for a more systems approach to agricultural production, processing and marketing can be met by the vertical integration inherent in the co-operative form and concerns about relationship risk can be addressed through the creation of delivery shares. Internally, tradable delivery rights result in much better specified property rights, while the focus on a single commodity results in fewer control and influence costs. As well,

member commitment is enhanced as a result of the NGC differentiating itself from IOFs by virtue of the fact that the NGC offers members a value-added investment opportunity.

Interestingly, the adaptive response represented by NGCs came not from the existing traditional co-ops but from a new cooperative model. This pattern should not be surprising, since existing organizations often find it difficult to change their direction or their structure. Indeed, property right problems themselves create incentives in existing organizations that make it difficult for them to adopt new structures. For instance, the free rider problem and the horizon problem may limit the incentive that members have to push for organizational change. In other cases, influence and control problems result in certain groups within a co-op being able to pursue their vested interests and preserve the status quo. Ideological positions can also restrict change.

Consequently, organizational change often has to come from outside. The rise of NGCs is an example of this change from outside. In the early 1990s, the development of NGCs was seen as a marginal activity – NGCs were not viewed as being “real” co-ops and many traditional co-ops attempted to appropriate the “new generation” moniker for themselves. The founders of NGCs also saw themselves as outside the traditional cooperatives. In a number of instances, NGCs were formed because a group of farmers felt that their traditional co-op was not responding quickly enough to the changes occurring in agriculture.

Although NGCs emerged outside of the traditional cooperatives, they are nevertheless having an impact on the traditional co-ops. As Cook (1995) notes, some traditional co-ops adopted base capital plans as they struggled with the incentive problems caused when member investment was not linked with member business. The traditional co-ops have also experimented with allowing members to invest directly in a specific portion of a co-op's value-added activities. A good example of this is Harvest States, who in 1996 gave producers an opportunity to invest in "equity participation units" in Harvest States' food processing operations (Erickson).

More importantly, perhaps, NGCs are no longer seen as organizations on the fringe. The NGC model is now viewed as a serious organizational structure. Commercial banks, for instance, are increasingly interested in funding NGC operations, while governments see them as a tool for industry development, particularly in niche areas where coordination of primary production and processing is critical.

References

- Boehlje, M. 1996. "Industrialization of Agriculture: What are the implications?" *Choices* Fourth Quarter: 30-33.
- Ben-Ner, A. 1984. "On the Stability of the Cooperative Type of Organization." *Journal of Comparative Economics* 8: 247-260.
- Cobia, D. W. (1997) "New Generation Cooperatives: External Environment and Investor Characteristics." In *Cooperatives: Their Importance in the Future Food and Agricultural System*, ed. M. Cook, et al. Washington, D.C., National Council on Farmer Cooperatives and The Food and Agricultural Marketing Consortium.

- Cotterill, Ronald W. 1984. "The competitive yardstick school of cooperative thought." *American Cooperation*. Washington, DC: American Institute of Cooperation. 41-54.
- Cook, M. 1994. "The Role of Management Behavior in Agricultural Cooperatives." *Journal of Agricultural Cooperation* 9: 42-58.
- Cook, M. 1995. "The Future of U.S. Agricultural Cooperatives : A Neo-Institutional Approach." *American Journal of Agricultural Economics* 77(5):1153-1159
- Drabenstott, M. 1994. "Industrialization: Steady Current or Tidal Wave?" *Choices* Fourth Quarter: 4-8.
- Erickson, Jim. 1996. "Harvest States Investment Plan Offers Producers Value-added Opportunities." *Rural Cooperatives*. November/December: 4-5.
- Fulton, M.E. 1996. "Co-operative Identity and Commercial Success." Paper presented at the 1996 Co-operatives Key Issues Conference *Reinventing Co-operatives – The Next Generation*, October 24-25, Sydney Australia.
- Fulton, M.E. 1999. "Co-operatives and Member Commitment." Paper presented at *The Role of Cooperative Entrepreneurship in the Modern Market Environment* conference, June 11, Helsinki, Finland,.
- Fulton, M.E. and L. Hammond Ketilson. 1992. "The role of cooperatives in communities: Examples from Saskatchewan." *Journal of Agricultural Cooperation* 7: 15-42.
- Harris, A., Stefanson, B. and Fulton, M. 1996. "New Generation Cooperatives and Cooperative Theory," *Journal of Co-operatives* 11: 15-28.
- James, C.L. (1995) *Spanning Boundaries: Rethinking Community, Competitiveness, and Cooperation*. Work in Process. National Rural Cooperative Development Task Force and the Cooperative Development Foundation, April.
- Kast, Fremont E. and James E. Rosenzweig. 1985. *Organization and Management: A Systems and Contingency Approach*. New York: McGraw-Hill.

- Knoeber, C.R., and D.L. Baumer. 1983. "Understanding retained patronage refunds in agricultural cooperatives." *American Journal of Agricultural Economics* 58 (February):30-37.
- Miyazaki, H. 1984. "On Success and Dissolution of the Labour Managed Firm in a Capitalist Economy." *Journal of Political Economy* 92(5): 909-31.
- Porter, P.K. and G.W. Scully. 1987. "Economic Efficiency in Cooperatives." *The Journal of Law and Economics* XXX: 489-512.
- Rogers, R. T., and B. W. Marion. "Food manufacturing activities of the largest agricultural cooperatives: Market power and strategic behavior implications." *Journal of Agricultural Cooperation* 5(1990): 59-73.
- Rustebakke, Brian. 1998. "Another 5 million bushels for Dakota Growers Pasta." *Northscape News*. July 21. As found August 22, 1999 on <http://www.gfherald.com/news/daily/612/612pasta.htm>
- Torgerson, Randall E., Bruce Reynolds, and Thomas W. Gray. 1998. "Evolution of Cooperative Thought, Theory and Purpose." *Journal of Cooperatives* 13:1-20.
- Zeuli, K. and R. King. 1998. "A Model Assessing Alternative Organizational Forms for Value-Added Enterprises." Selected Paper presented at the Annual Meeting of the American Agricultural Economics Association, August 2-5, Salt Lake City, Utah.