

## **RESPONSE AND ADAPTATION:**

### **CANADIAN AGRICULTURAL CO-OPERATIVES IN THE 21<sup>ST</sup> CENTURY**

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## INTRODUCTION

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The agriculture and food sector is in the process of a major transformation. Firm concentration is growing, vertical integration is becoming more prevalent, contracts are displacing spot markets and the private funding of R&D is replacing public funding as governments allow firms to use intellectual property rights (IPRs) to protect innovations, many of which involve biotechnology. As well, the various segments of the agri-food sector are becoming more interconnected and the sector is becoming increasingly similar to other sectors of the economy.

At the same time as these external changes are going on, many co-operatives are facing mounting internal pressures. These internal pressures arise from an increasing heterogeneity among members and from so-called property rights problems – problems that stem from the incentive structures that are in place in co-operatives.

Co-operatives have long played an important and critical role in agriculture. As the structure of agriculture and the internal dynamics in co-operatives change, the structure and behaviour of agricultural co-operatives require alteration if they are to remain effective and responsive organizations. The purpose of this research project is to examine the restructuring and transformation that is underway in agriculture and to outline the implications of these changes for co-operatives.

### **Observed Patterns: Agriculture Co-operatives and Change**

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A glance at agricultural co-operatives in Canada and the U.S. – and indeed elsewhere in the world – indicates a number of patterns. These patterns are important because they shed some light on the changes that are currently underway in co-operatives. Indeed, the five patterns presented below provide the basis for understanding the successes and the difficulties that co-operatives have in responding to the changing agricultural environment and to the mounting internal pressures.

**Pattern I** – A number of co-operatives are enjoying considerable success, attracting new members and growing quickly. The co-operatives in this group include:<sup>1</sup>

- New Generation Co-operatives
- Super-Locals
- Food Franchise Co-operatives

**Pattern II** – Some co-operatives are under considerable stress and are facing financial difficulties, falling market share, and loss of membership. The co-

operatives in this group tend to be centralized, large, multipurpose co-operatives. Not all large co-operatives, however, are under stress. Large co-operatives that concentrate on their core activities appear to be successful.

**Pattern III** – Many co-operatives are engaging in mergers and acquisitions, often as a result of efforts to keep pace with increased competition from transnational corporations and to take advantage of economies of scale.

**Pattern IV** – Declining member commitment is a concern expressed by many co-operatives. Waning member commitment is a result of a perceived lack of connection between member success and co-operative success, combined with the inability of the co-operative to differentiate itself from other organizational or business forms.

**Pattern V** – In a significant number of co-operatives, geographical location is becoming less and less important as a common bond for co-operative members. Instead, other similarities such as type of commodity production, business interests or economic position provide bonding forces.

Most co-operatives fall into at least one of these five groups and some belong to more than one group. Table 1 provides examples of co-operatives that fit the patterns identified. The co-operatives identified in Table 1 are the subject of short case studies. Table 2 provides a summary of the key points raised in the case studies of these co-operatives.

### **Co-operatives: A Set of Relationships**

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The patterns and the pressures for change outlined above can be understood by re-thinking the way in which a co-operative – and indeed any organization – is conceptualized. The process of re-thinking begins with the recognition that organizations are not fixed structures that operate independently of the technology and the economic, political and social connections of which they are part.

Organizations have typically been viewed much as organizational charts are drawn – as very hierarchical and with limited connections between the groups that make up the organization. Figure 1, which represents this old organizational structure, could also represent a classroom, a factory, or the structure of a university. Like classical economic theories that use the factory as a model, this industrial structure came into being over one hundred years ago with the factory-driven industrial revolution. The organizational structure in Figure 1 mirrors the machines upon which it is based: each element is a separate link in the chain, little integrated with the other units except to pass inputs or outputs, and all governed by a single, over-riding management. Philosophically, Figure 1 is built on reductionism – that things can be best understood by taking them apart and examining the components.

The reconceptualization of organizations – and hence co-operatives – begins with the observation that they are fluid structures embedded in an economic, political, social and technological context. This new view of organizations can be represented as a network (see Figure 2). In a network, the individual units – or nodes – are still autonomous, but they have access to other nodes in the network. Networks allow for synergies and complementarities. They allow ideas, actions, plans, and so on, to work together for a combined result that is greater than the sum of their individual impacts.<sup>2</sup>

The network concept can be applied to co-operatives by thinking of the co-op as a set of relationships and by thinking of the co-op as being part of – and hence being influenced by as well as influencing – a larger economic, political, social and technological environment. The key relationships that define a co-operative are:

- Relationships among members
- Relationships among the activities the co-operative undertakes; and
- Relationships between members and the co-operative activities.

Figure 3 illustrates these three sets of relationships. Of course, there are many other relationships that are important in a co-op, including the relationship of members with their representatives, relationship of members with staff, and relationships among investors and customers/suppliers.

The strength and vitality of a co-operative is determined by the strength of the relationships outlined in Figure 3. Relationship strength is related to the degree of integration, whether it be among members, among co-operative activities, or between members and the co-operative. In co-operatives where the degree of integration is strong, the co-operative is strong. Likewise, in co-operatives where the degree of integration is low, the co-operative is facing difficulties.

The degree of integration in a relationship is a measure of the extent to which the various elements and activities in a relationship are connected or are interdependent. Relationships that have a high degree of integration are those in which strong complementarities exist between the elements. Complementarities are often referred to as positive feedback. Strong complementarities mean that when one activity or element is increased or strengthened, other activities or elements are also increased or strengthened. Highly integrated relationships also typically involve frequent mutual interactions and operate best when there is a high degree of trust present between the players.

From the point of view of the co-operative's activities, complementarities are the basis for economies of scale (average costs fall as more output is produced) and for economies of scope (the total cost of producing two outputs together is less than the cost of producing the two outputs separately). For instance, strong complementarities between the activities of a co-op exist when the activities share common resources, since strengthening this common resource will strengthen all the activities. An example of a common resource is the agronomist hired by a New Generation Co-op (NGC). The agronomist provides important agronomic and marketing information to the members; the

agronomist also provides important information about the members' crops to the co-op to aid in processing and marketing decisions. The result is economies of scope between the member service activity and the co-op's processing and marketing activities. Undertaking both of these activities together results in lower costs and greater returns than would be the case if these activities were undertaken separately.

Complementarities are also important for the relationships that involve members. Complementarities imply a high degree of integration, which in turn implies interdependence, not independence. Thus, integration is low in a co-op in which each member believes that the quality of the product they deliver to the co-op has no effect on the returns earned by other members. Similarly, integration is low if the activities of the co-op and the returns generated therefrom have little impact on the returns earned by the members on their own farming operations. Integration is strengthened if members clearly understand that the quality of their product strongly affects the returns earned by the other members. It is also strengthened the greater the connection between the returns earned in the co-operative and the returns earned on the farm.

The conceptualization of the co-operative as a set of relationships serves to highlight the role of governance and management. The role of governance and management is to ensure a high degree of integration in the relationships identified above. The degree of integration is a reflection of the extent to which internal incentive problems can be solved and the extent to which commonalities and interdependencies between members are identified – especially as members become more heterogeneous. The degree of integration also contributes to the ability of the co-operative to reflect the changes going on within its external environment.

## **CO-OPERATIVES AND PRESSURES FOR CHANGE**

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Co-operatives are conditioned by the external environment in which they operate and by a set of internal forces that affect the behavior of the members and the management of the co-op. Partly because of the place many co-operatives are in their life cycle and partly because of the changes occurring in the rest of agriculture, the internal pressures are building at precisely the same time that the external environment is being fundamentally altered. The result is that co-operatives are under tremendous pressure to change. This chapter outlines the changes that are occurring in the external and internal environments, respectively. The implication of these changes for the organizational structure and the activities of the co-operatives are then examined.

### **External Pressures for Change**

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The agriculture industry is undergoing a tremendous transformation – a transformation that is often referred to as industrialization. Industrialization is defined as “the application of modern industrial manufacturing, production, procurement, distribution, and coordination concepts to the food and industrial product chain”.<sup>3</sup> These concepts are being applied to agriculture because technology has now removed much of the uncertainty and the instability that was traditionally found in the biological processes on which agriculture is based. As agricultural production becomes more predictable and controllable, agriculture takes on the characteristics of factory production and of the industrialized system of product sourcing and marketing.

Table 3 compares traditional agriculture with the new industrialized agriculture. Key elements of the transformation that is now underway include: 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.

The case study of Warburton’s Ltd. Bakery illustrates a number of the key elements of the move from traditional agriculture to the new agriculture. This case clearly shows that wheat can no longer be considered an undifferentiated commodity. Consumer tastes have changed so that top quality loaves of bread can be sold at a premium. Since different varieties of wheat produce different qualities of bread, different varieties have different values in end-use. One consequence of this change is that the production and handling stages are not independent of the retail stage – if farmers do not segregate their varieties or if the elevator companies do not maintain varietal separation, then Warburton’s is unable to realize the value at the retail level. This value, however, can be created and

maintained by coordination. Coordination, by its very nature, requires the involvement and co-operation of other parties – in this case, the farmers, the elevator companies, and the Canadian Wheat Board (CWB). To ensure this involvement and co-operation, contracts are used. Information is a key component of the coordination. Finally, trust plays a critical role in ensuring the benefits of coordination are obtained. Concerns about trust now become a key aspect of relationship risk – the worry that contract terms will be altered or that the party with which you have committed significant resources is no longer in business.

The industrialization of agriculture operates alongside globalization. Globalization is characterized by an increase in both the rate and the nature of social and economic change through rapid advancement in technologies, the dwindling of the nation-state and its corresponding boundaries, the fluid movement of goods and people and the mingling of cultures. Emerging from these forces are three interrelated factors influencing agriculture. These can be broadly categorized as follows:

- **Changing Role of Government** – Reflected by the reduction of boundaries between states combined with increased environmental, health and food safety regulations
- **Changes in Consumer Culture** – Characterized by increased demand for products differentiated along attribute lines (e.g., genetically modified versus non-genetically modified, organic, low fat, preparation time) and for ethnic food products (e.g., Indian, Mexican, Italian)
- **Rapid Changes in Technology** – Influence the way food is produced, processed and distributed.

### Government

The social and economic environment – not only for agriculture, but for all segments of the economy – is being transformed by the changing nature of government. In some areas, government is becoming less involved in the economy, while in other areas government influence is being increasingly felt.

Where government is becoming less involved, this change is brought about by the re-emergence of the “market” as the primary mechanism by which resource allocation decisions are made. Decreasing government involvement is also reflected in the reduction of tariff and non-tariff barriers and negotiations within the World Trade Organization. This withdrawal of government has significant impacts for agriculture. Most notably, governments are withdrawing from providing agricultural price supports, subsidies and funding for research and development.

At the same time that government is withdrawing from parts of the agricultural system, it is increasing its involvement in other aspects. One important aspect is in regulations governing the environment and food health and safety. In response to increased consumer concerns about the environment and food safety, governments in a number of countries

are responding with increased regulations in such areas as the location and size of intensive livestock operations and the nature of product testing and licensing.

### *Consumer Culture*

The intermingling of cultures through media, migration and travel – combined with the emergence of an environmental ethic and health consciousness – is reinventing consumer preferences. The result is a growing demand for diversified products and the emergence of niche markets based upon specific attributes such as “low in fat”, “organic” and “ready-made”. Rising standards of living result in an increased consumer emphasis on the quality attributes of the foods.

Issues surrounding health, safety and environmental practices are increasingly coming to the forefront of consumer concerns. This increased emphasis on food health and safety is seen in the Bovine Spongiform Encephalopathy (BSE) crisis in the British beef industry as well as the emergence of water safety issues related to *e. coli* bacteria. These food scares have resulted in decreasing consumer trust in the ability of scientists and regulations to protect human health. Emerging from these concerns is an increased consumer emphasis on both the physical characteristics of food products and the processes involved in production such as organic versus non-organic, free range versus factory farm and genetically modified (GM) versus non-GM food.

In most cases satisfying the demand for attribute specific products requires increased attention on the part of food companies to quality and quantity controls at all stages of production. Vertical coordination – whether by contract or ownership – between the food production, processing and distribution segments can help regulate the quality and quantity necessary for meeting specific market demands as well as for controlling costs.

### *Technological Change*

Rapidly changing technology is also a significant force defining the industrialization and globalization of agriculture. Technological advances in transportation, storage, packaging and information technology have enabled food production firms to meet the increasing specific and differentiated consumer tastes outlined above. However, technology alone is not enough to deliver consistent products to new groups of consumers. Changes in the organizational form of agriculture are also required to take advantage of these technological innovations. Thus, vertical integration and other forms of vertical control such as contracting or joint ventures have accompanied the introduction of new technologies.

Particularly significant in the agriculture industry are advances in biotechnology. Biotechnology is leading to greater industry concentration and either greater vertical integration or increased strategic alliances and contracting. These developments are likely to reduce the power of primary agriculture within the agriculture and food system. In addition, there is evidence of increasing capital intensity associated with the use of

biotechnology products. This puts increased pressure on farmers and will result in increasing income differentials between farmers who have the ability to employ new technologies and those who do not.<sup>4</sup>

### ***Implications of Structural Change***

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One of the most significant implications of industrialization – at least for co-operatives – is an increased heterogeneity among farmers. Increased heterogeneity occurs as farmers move from being independent producers of generic commodities bound for spot markets to producers of specialized products who are participating in varying degrees of vertical integration, vertical coordination or strategic alliances. Heterogeneity among farmers is also a product of socio-economic differentiation as traditional agricultural commodity production experiences a continuing decline in returns.

Due to increasing heterogeneity, collective action among farmers will become more difficult. Heterogeneous farmers often have greater difficulty seeing the interdependencies that exist between them, thus making free rider problems more severe. As well, the areas in which a large number of farmers can agree are reduced, leading to fragmentation and, in some cases, conflict.

The nature of the relationships between actors within the agriculture industry also changes along with the changes in technology, consumer demand and the role of government described above. An integral part of this transformation is a shift in the source of power and control. There are two key points of power and control in agriculture. The first point of power derives from knowledge of consumer demand. Those firms that are close to consumers and have unique knowledge of the specificity of demand are able to transfer this power through the food chain. The second power point lies with the raw material suppliers and especially with those suppliers whose input in the production process is not easily substitutable. The inputs with the least amount of substitutability are the genetic materials. Biotechnology and increased predictability and control of genetic manipulation provide additional power to those who control genetic material. The key in both of these aspects of power is knowledge or unique access to special information.

Knowledge is becoming a key driver in obtaining control, increasing profits and reducing risk. The increasing importance of knowledge is a result of the increasingly sophisticated and complex nature of manufacturing and management. This is a result of the dramatic growth in knowledge of the processes of production increasingly evident in the development of biotechnology. These increases in both complexity and information mean that those who are able to utilize knowledge resources to organize the total production system effectively will have a comparative advantage.

As government withdraws from funding for research and knowledge dissemination, those firms and individuals who are able to access independent sources of knowledge will gain a comparative advantage. Ownership or contract coordinated production-processing-

distribution systems are more likely to engage in research and development as a form of strategic competitive advantage. The knowledge obtained under these circumstances is proprietary and more focused on total system efficiency rather than on individual components. These integrated firms are able to increase control and reduce risk. This provides an immense advantage to the ownership or contract coordinated production system compared to the system of independent stages and decision making.

The process of increasing specialization and vertical coordination or contracting also means that producers will experience a loss in their independence. Production and management decisions once determined solely by farmers according to market indicators will be increasingly influenced and coordinated by interdependent relationships with other actors along the supply chain. Since power and control are dictated by information and are, therefore, greatest at either the retail stage or the genetic input stage, producers will experience declining power and control. And since power is the ability to transfer risk to other actors, declining power will result in increases in the risk experienced by producers.

### **Internal Pressures for Change**

In addition to the external pressures identified above, there are also a number of internal pressures affecting co-operatives. Co-operatives are not static entities. Indeed, co-operatives are often thought to move through a life cycle. As they move through this life cycle, the internal relationships among the members, and between the members and the management, change. These changes typically result in less member commitment, less focus and dynamism in the activities of the co-operative, and a more difficult organization to manage. Many agricultural co-operatives are reaching a stage in their life cycle today where these pressures are becoming pronounced. As these internal pressures mount, the need for the co-operative to alter its activities and organizational form increases.

The life cycle begins with the formation of the co-operative. Co-operatives form for a variety of reasons. Historically, those co-operatives that were formed to address market failures (e.g., the lack of competition in a market or the lack of service provision) have been much more successful than those that were formed to address oversupply conditions in the market. More recently, the creation of New Generation Co-operatives (NGCs) identifies an additional reason for co-operative formation – the desire to invest financially in another segment of the agriculture and food industry. It is important to note that not all co-operatives are successful at making it past the start-up stage.<sup>5</sup>

At the early stages in the life cycle, co-operatives typically are fairly narrowly focused in terms of their activities, have a relatively homogeneous membership and experience strong member commitment. Indeed, strong member commitment is typically a necessary ingredient for co-operative success.<sup>6</sup> Historically, co-operatives were formed around a relatively homogeneous group of farmers, often operating in a common geographical locale, with common grievances and visions. This homogeneity provided the basis for

collective action and for the formation of a collective identity surrounding commonly shared values of co-operative ideology.

Co-operative ideology was one mechanism by which co-operatives differentiated themselves from other businesses and organizations. There are a number of ways of viewing ideology (see the box on Ideology), all of which had a role in the formation of co-operatives. Co-operative ideology served as a way to secure membership commitment during the formation and the early years of co-operatives. It also served as a way of reducing the free rider and other so-called property rights problems. As will be discussed below, understanding these problems is key to understanding the internal pressures facing co-operatives.

For NGCs, the pattern described above is somewhat different. While start-up NGCs share with their traditional counterparts the focus on a narrow set of activities and a relatively homogeneous group of members, they differ in that a common geographical locale is often not a key factor. The lack of a common geographical base is an important characteristic of U.S. Premium Beef and Spring Wheat Bakers, two of the NGCs featured in the case studies. Also, co-operative ideology appears to be much less pronounced in start-up NGCs. NGCs, however, appear to have substituted ideology with other features with which to differentiate themselves from investor-owned firms (IOFs). These other features include the ability to offer members an investment opportunity in the agri-food industry.<sup>7</sup>

These features of co-ops in their start-up phase – fairly narrow focused set of activities, relatively homogeneous membership, common bond among members, key differentiating features from IOFs – typically begin to erode as the co-operative matures. Co-operatives often expand into new areas of activity. Sometimes this expansion is at the urging of members, while other times it is a result of the desire by management to increase its purview. The former phenomenon is sometimes a reflection of influence costs, while the latter phenomenon is an example of the control problem. Both influence costs and the control problem are examples of property rights issues that create internal pressures for change in co-operatives. If this expansion is not done in a way so that the new activities remain integrated with the co-op's other activities and with the interests of the members, the co-operative begins to suffer stresses. Members begin to question the value of the activities in which the co-operative is involved, all the while finding more and more difficulties in monitoring the efficacy of the activities and the management.

As producers become more heterogeneous in socio-economic status, business interests and needs, collective agreement concerning values, grievances and goals along the historical lines embodied in co-operative ideology becomes increasingly difficult. Likewise, as farmers become alienated from the political sphere (partly because government is less involved in providing subsidies to agriculture), collective action on the basis of political interests is more and more improbable. More generally, an increase in member heterogeneity means that co-operatives find it more and more difficult to provide services that appeal to a wide range of the membership.

For instance, size is one dimension along which members typically differentiate themselves over time. As they mature, many co-ops observe the emergence of the 80–20 rule – 80 per cent of the business is done by 20 per cent of the members. In this situation, co-operatives are faced with the prospect of having to provide one type of service to the large commercial farmers who do the vast majority of the business, all the while trying to provide a very different type of service to the group of farmers that make up the majority of the membership and hence have voting control.<sup>8</sup>

Increasing member heterogeneity has numerous effects on the co-operative. Some co-operatives respond by increasing the number of activities undertaken by the co-operative – the consequences of this are outlined above. In most co-operatives, increased member heterogeneity means an increased incentive for members of sub-groups to lobby or pressure the elected officials and the management and employees, resulting in increased control issues and rising influence costs. The loss of common goals for the members also results in the emergence of the horizon problem and the free rider problem as serious problems in the co-operative. One indication of the emergence of these problems is a decline in membership commitment. Finally, an increase in heterogeneity also increases the likelihood that a group of co-op members will leave the co-operative to start a new group with activities directed at their own specific interests.

As co-operatives mature, many also find it increasingly difficult to differentiate themselves and their activities from IOFs. More specifically, the inter-linked trends of increasing heterogeneity among farmers, the waning of co-operative ideology and generational change means that co-ops increasingly find themselves undertaking the same activities and in the same fashion as their IOF counterparts. A lack of differentiation is indicated by a decline in membership commitment, a decline in the competitiveness of the co-op in terms of price and service, and a decline in market share.

Capital acquisition is also an issue as co-operatives mature, particularly if the co-operative is maturing at the same time that the industry is undergoing dramatic changes. This was the problem faced by Saskatchewan Wheat Pool, for example, as it sought to diversify its operations and rebuild its elevator and service centres at the same time that a significant portion of its membership was reaching retirement age. Tri Valley growers in California faced similar problems, problems that the Dairy Farmers Group in Australia just now has to deal with.

Capital acquisition is a problem in co-operatives because members often have little incentive – little sense of ownership – to supply capital to the co-op (see the discussion of the free rider problem below). This problem is often overcome during the start-up phase when members see themselves as having a common goal and when ideological commitment is high. As member heterogeneity increases, ideological commitment decreases, and members have less and less feeling of ownership over their co-operative. Members have less and less incentive to contribute capital to the co-op. A maturing co-op is also more likely to have to return the member equity that has been retained, thus creating a capital shortfall. This shortfall is accentuated if the industry is undergoing major change and large capital expenditures are required to modernize equipment or to invest in new areas.

*Property Rights and  
Co-operative Management  
and Governance*

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The internal pressures for change can be directly linked to problems associated with property rights in a co-operative. The property rights issues that have been identified for co-operatives are as follows: free rider issues; horizon problems; control issues in governance and management; and influence costs problems. A definition of these terms is provided in the box on property rights.

The term “property rights” as applied to co-operatives has its origin in the observation that members of a co-op appear not to have a well-defined set of rights or claims to the co-op’s assets or the benefits provided by the co-op (these are the so-called property referred to in the phrase). The lack of a well-defined set of rights or claims arises because shares are not typically traded, benefits are derived from use of the co-op and not from ownership, and voting is on the basis of membership and not capital invested or business done. Because co-operative shares are not traded on the open market, for example, it is argued that co-operative share values cannot be used as a convenient performance gauge; the result is that operational inefficiencies can go unobserved. Widely dispersed ownership, particularly in large co-operatives, provides individual members with few incentives to monitor the performance of their co-operative.

Co-operatives are prone to further inefficiencies, it is suggested, because members benefit from the use of the co-op and not from the contribution of capital to the co-op. This separation makes members reluctant to contribute capital. As well, since members can only receive a return on their investment (through patronage refunds) while they actually use the co-operative, they will tend to support activities that maximize short-term rather than long-term returns. These problems, it is suggested, are not present in IOFs, because the trading of shares based on capital allocation allows the expected future earnings of long-term investments to be reflected in the value of the company.

The importance of property rights issues in co-operatives stems from the observation that co-operative success is closely linked to members having a sense of ownership and control in their co-operative. A simplistic version of the property rights theory suggests that this ownership and control can only come about by clearly defining the *individual* rights that members have to the assets and benefits of the co-op. If these individual rights are not defined, it is argued that organizations that are collectively owned and controlled must inevitably give way to organizations that are individually owned and controlled. In short, co-operatives cannot exist as efficient organizations for any long period of time because property rights in co-operatives are not well defined and because co-operatives are often formed to pursue multiple objectives.<sup>9</sup>

The history of the last 150 years, of course, shows that this simplistic view is incorrect. Co-operatives have existed and do exist – in fact, they have been formed in virtually every country of the world, in virtually every sector of the economy and in virtually every type of economic system. And a great number of co-ops have operated very effectively

for very long periods of time. Moreover, there is a substantial body of literature that shows that co-operatives are just as profitable and efficient as their IOF counterparts.<sup>10</sup>

Although the simplistic property rights theory does not stand up to empirical testing, this does not mean the theory is without relevance. Indeed, a more comprehensive version provides some important insights into the pressures that co-operatives face. Under this more comprehensive view, ownership and control remain vital factors in determining the health of the co-operative.<sup>11</sup> Indeed, if the members of a co-operative do not have some sort of incentive to invest in the assets of the organization, to monitor its performance, and to limit lobbying and internal competition for resources, then the co-operative will not succeed. Included among the factors that influence the degree of ownership and control that members perceive they have are such things as values, ideology, member education, the sense of common goals among members, the size of and the nature of the activities carried out by the co-op, and the type of management and governance regimes in place.

Understanding the property rights issues inherent in co-operatives when this more comprehensive view is considered is one of the key elements that co-operative management must address. Indeed, successful co-operative managers need a number of skills over and above those required by managers of IOFs to ensure that members retain a high degree of ownership and control. These skills include: the ability to deal with vagueness, complexity, and conflict; superior human resource management skills because of the limited capital resources; an ability to understand the user/owner conflict that is inherent in co-ops and to communicate this conflict effectively; and the ability to manage and achieve a wider range of objectives and goals than those in IOFs.<sup>12</sup>

Since co-operatives have existed and flourished for more than 100 years, it is clear that these property rights issues have been successfully addressed. Indeed, it could be argued that co-operatives have long recognized that property right problems are important to the health of their organization and have undertaken activities to reduce them. One reason for the success of co-operatives over the years can be linked to the fact that co-operatives have taken great pains to educate their elected and corporate officials in the business of running a co-operative. For instance, compulsory board training is a feature of most large co-operatives in Canada and the United States.<sup>13</sup>

Co-operatives have also spent significant amounts of money on member education, whether it be through the training of field staff, the development of training and promotional materials, informational courses, and annual meetings. Member education is a continuous process that helps members see the connection between their self-interest and the interests of the group. Thus, member-education programs are a direct, substantive response to the horizon and free-rider problems.

Given the importance of the property rights issues, the changing composition and growing heterogeneity of co-operative membership and the general waning of co-operative ideology are likely to mean a loss of the sense of membership ownership and control. In particular, these changes are likely to create significant governance and management issues and make it more difficult to create the kind of integration between

and among co-operative activities and members that is required to keep the co-operative successful. The next section examines the implications for co-operatives of these changing internal elements of a co-operative and connects this with the impact of the changing external environment.

## CO-OPERATIVE ADAPTATION

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The characterization of a co-operative as a set of relationships and as being part of a larger economic, political, social and technological environment implies that changes in either the external environment or in the internal relationships will have significant effects on the co-op. In particular, as the internal and external context undergoes change, instabilities in the relationships within the co-operative and between the co-operative and its environment will arise. These instabilities are a source of pressure for change. The following sections examine the implications of the external and internal pressures for change that were identified above.

### External Pressures for Co-operative Adaptation

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The most obvious impact of the external changes going on in agriculture is the pressure for co-operatives – like other firms in agriculture – to amalgamate and get bigger. The pressures for mergers and acquisitions are multi-fold. Part of the reason has to do with economies of scale. Large firms are better able than small firms to spread the cost of certain key and common resources over a larger sales volume, with the result that costs are lower. These common resources include such things as information technology systems, distribution systems, the gathering of market intelligence, and in the case of the life science companies, the specific genes that confer an agronomic benefit and the knowledge of how to insert these genes into existing varieties.

Part of the reason for firms getting bigger is that they need to be bigger to deal successfully with other large firms.<sup>14</sup> As concentration rises in the seed and chemical input segments and in the retail sector, firms in related sectors feel they need to be larger to be able to purchase or sell the large volume of product required by these increasingly concentrated firms. Since the retailers and input suppliers will find it more cost effective to deal with a few buyers or suppliers, rather than dealing with a large number, there is an advantage to being large. There is also an advantage to being large in that larger firms are likely to have greater bargaining power – small firms with limited volume are much more dispensable than are large firms with significant volumes. This factor is particularly important if the small firm is dealing with a generic commodity rather than a highly differentiated product.

Merger and acquisition also appear to be strategies employed by firms that are responding to an enlarged market area. One of the effects of globalization and industrialization is to expand traditional market areas. For instance, on the Canadian prairies, the signing of the North American Free Trade Agreement and the change in transportation policy marked the end of the traditional provincial markets in which the grain co-operatives operated, and signaled the formation of a regional or even North American market. A similar pattern is occurring in Europe, where traditionally national

markets are being transformed into pan-European markets. Empirical evidence suggests that as market areas expand, competition initially increases as firms in the previously separate markets begin competing with each other. However, this initial rise in competition appears to give way to reduced competition as the firms merge and concentration rises.<sup>15</sup>

Co-operatives, like their IOF counterparts, have made strategic decisions to merge and acquire new companies in an effort to keep costs low and to maintain a market presence. The case studies provide examples of co-operatives from around the world that have undertaken mergers, including Agricore, MD Foods/Klover, Dairy Farmers Group, and United Country Brands.

While merger is one response to the need to get bigger, this is not the only strategy employed. A very different strategy is to remain small and retain some independence, while at the same time creating economies of scale in key areas by joining with others in a co-operative structure to supply a product jointly or to bargain with a supplier. The rise of the CUMA machinery co-ops in Québec, the formation of a co-op by Burger King restaurants, and the creation of U.S. Premium Beef are excellent examples of this strategy.

The changes occurring in agriculture have other less obvious, but just as important, impacts on the structure of agricultural co-ops. Historically, farmers have used co-operatives 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 4 compares the structure of traditional agriculture (see Table 3) with traditional co-ops. Traditional co-ops adopted structural features that mirrored those found in the larger agricultural environment.

The notion that organizations mirror the larger environment of which they are part is an important element of a contingency view of management. Under this management view, congruence should exist between the organization and its environment. Indeed, the primary role of management is seen as maximizing or optimizing this congruence. More generally, co-operatives – like any organization – can be viewed as organisms inhabiting an environment. Those organizations that are able to develop structural elements that “fit” with the environment will generally survive. Thus, over time, co-operatives with organizational and structural features that mirror the social and economic environment of which they are part are expected to survive and prosper.<sup>16</sup>

Table 4 illustrates some of the ways in which traditional co-operatives have mirrored their environment. 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).

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.<sup>17</sup> This pattern is consistent with a view of the world in which the product chain stages in agriculture are conceived of 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”.<sup>18</sup> To provide countervailing power, co-ops themselves used “bricks and mortar”, investing heavily in storage, handling and processing facilities.

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 5 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 adaptations that co-operatives have undertaken. For instance, the purchasing co-operative formed by Burger King restaurants was created to enhance the overall effectiveness and efficiency of the supply system by reducing transaction costs. One of the reasons for the success of Dakota Growers Pasta was that they were able to take the vertical integration that was occurring in the industry in the form of geographically common durum mills and pasta plants a step further by providing a direct link to the durum grower.<sup>19</sup> The vertical integration between cattle producers and the meat packing industry that is an integral part of U.S. Premium Beef is another example of how the co-op model can be used to achieve greater vertical coordination.

A number of co-operatives have introduced the up-front purchase of delivery shares to ensure a high degree of commitment by both the co-op and the members, thus reducing concerns about opportunistic behavior and relationship risk.<sup>20</sup> Good examples of co-ops that have moved in this direction are U.S. Premium Beef, American Crystal and United Sugars.

The development of delivery shares is not the only way that co-operatives have adapted to increase their congruence with the external environment of which they are part. A number of co-operatives have become more specialized in their activities and the services they provide. Good examples of this strategy can be seen in the structure of the proposed

United Country Brands and in virtually all the NGCs. Co-operatives have also invested substantial amounts in the development of services that use the information possessed by the members to improve product quality and enhance the value of the product. The introduction of the Quality Payment System by American Crystal and the use of a value-based pricing grid and electronic identification tags by U.S. Premium Beef are good examples of this strategy. Co-operatives have also provided more integration in the services they provide to their members, as seen in the actions of the super-locals such as Naicam Co-op and Prairie Centre Credit Union.

NGCs make up a significant proportion of the many examples of co-operatives adapting their structure and strategy to mirror the new industrialized agriculture. NGCs, therefore, must 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.<sup>21</sup>

### **Internal Pressures for Co-operative Adaptation**

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As discussed earlier, co-operatives face a number of property rights problems. These property rights problems tend to become more important as co-operatives mature and move through their life cycle. Traditional co-ops generally formed in response to market failures. Co-operatives that were able to compete successfully against IOFs continued in operation. As these co-operatives matured, they increasingly faced the property rights problems outlined above. For instance, in the start-up phase, and often for some period beyond, free-rider problems were often lessened by the presence of a strong ideological commitment of the members to the co-operative. In a similar fashion, the horizon, portfolio, and control problems were often reduced by member education and training.

However, as the co-ops grow older and larger and members become more diverse and adopt new attitudes, the property rights issues become more salient. As a consequence, co-operatives have begun to alter the property rights inherent in their organization so that members have greater incentive to contribute capital, make long-term investments and engage in proper monitoring and control. Indeed, much of the organizational adaptation that has occurred within traditional co-ops – examples range from seeking outside equity from the public trading of co-op shares (see the case study of Saskatchewan Wheat Pool and Dairy Farmers Group) to the conversion of redeemable member equity to permanent equity (see the case study of Tri Valley Growers) to joint ventures with IOFs – result from pressures arising from property rights problems.

The rise of the NGCs can also be seen in part as an institutional adaptation to these property rights problems. The property rights in an 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. Just as importantly, the members of an NGC have an obvious common interest and the success of their farm and the success of their co-operative are highly

linked. All of these factors suggest that members perceive that they have a much higher degree of ownership and control in an NGC than in a traditional co-op.

Co-ops must also differentiate themselves from IOFs in some fashion in order to operate effectively in a market. The greater the degree to which co-ops are able to differentiate themselves positively, the greater the member commitment is likely to be or to remain. 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, co-operative ideology has waned. Part of the reason for this waning is that co-operatives were unable to meet the expectations of members, thus causing disappointment and dissatisfaction with the co-operative model. Co-operative 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.

As a result of waning co-operative values (see box on co-operative values) and an increased similarity in the activities carried out by co-ops and IOFs, 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. For instance, 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, American Crystal replaced a previous IOF when it left the area. The super locals represented by co-ops like Naicam Co-op or Prairie Centre Credit Union can also be seen as examples of co-ops differentiating themselves from other firms. The local provision of a set of integrated services is a “product” not supplied by many other firms.

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 found in co-ops like Mountain Equipment Co-op (or Recreational Equipment Incorporated (REI) in the U.S.), 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, although it can be done. 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. A 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. Thus, co-ops like U.S. Premium Beef or Spring Wheat Bakers attract a very different group of farmers than those who are attracted to either traditional co-ops or to IOFs. Co-ops could also associate themselves with rural and farm values, something that to date has not been pursued to any great degree.

### **The Process of Co-operative Adaptation**

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As the internal and external pressures described above come to the forefront, co-operatives will have to modify their strategy and/or their structure in order to alleviate the pressures created by the instability. If co-operatives do not adapt, they risk the loss of member commitment, a falling market share, an inability to access capital, and a decline in the services and activities they can provide.

How do co-operatives adapt to changing circumstances? The following outlines the process of co-operative adaptation.

- Co-operatives adapt because key individuals – co-operative innovators – push for changes.
- Adaptation is always local and unique. It is a response to a set of specific problems facing a particular co-operative.
- Most co-operatives do not lead the adaptation process, but rather follow the lead of other co-operatives.
- The development of new co-operatives is an important form of innovation and adaptation and one that must be encouraged. While new co-operatives face some specific problems, these can be addressed with proper development assistance.
- While co-operatives that do not adapt experience problems, co-operatives that do adapt can also experience difficulties.

Each of the elements of co-operative adaptation will now be explored in more detail.

### ***Co-operative Innovators***

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Although co-operatives are collective organizations, the adaptation process is very much started by key individuals. Generally, there are three types of co-operative innovators:

- Key management persons operating in conjunction with opinion-makers of the board
- Members who break off from a co-operative to initiate their own collective action

- Completely new participants who have never belonged to co-operatives or have just entered the industry

Of these three types, the first type is the least common, although examples do exist. The formation of the super-locals, for instance, is often carried out by a key management person (Naicam Co-op is a case in point). The reason why the first type is less common is because change within any organization – not just co-operatives – is very difficult. As is outlined below, change is costly and it creates winners and losers. Both of these results reduce the likelihood that change will take place. The problem of winners and losers is particularly important within existing organizations. As a result, new organizations often spring up, since their formation does not threaten existing interests quite so directly. Many of the NGCs formed in the U.S. over the last decade provide illustrations of the second and third type of innovators. Spring Wheat Bakers, for instance, fits the second type of innovator, while U.S. Premium Beef represents the third type.

While the formation of new organizations reduces the direct threat to existing interests, it does not remove it completely. For example, when NGCs began to form in large numbers approximately eight to ten years ago, the traditional co-operatives were quite hostile to these new organizations, seeing them as threats to their membership base and to some of their business activities. NGCs were often characterized as not being legitimate co-ops. This attitude has changed, however, largely because of the success of the NGCs. Traditional co-ops are now adopting many of the structural features of the NGCs (examples include Tri Valley Growers, United Country Brands, Dairy Farmers Group) and/or are undertaking joint activities with NGCs (e.g., U.S. Premium Beef and Farmland).

### *Local and Unique*

#### *Adaptation*

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A key feature of innovation and adaptation is that they are rarely, if ever, generic processes that can be described and orchestrated in advance. Innovation and adaptation are almost always an attempt to solve a problem of one sort or another. Since the nature of the problem depends on both the larger environment and the individual human actors that are involved, the problems are always unique. As a result, innovation is varied, local and grounded in the context of the particular experience of the co-operative, its members and the innovator. This characterization is true, regardless of whether the innovations and adaptations take the form of an evolutionary alteration to an existing structure and/or strategy, or are a radical break with the past and the plotting of an entirely new direction. As a consequence, the innovation and adaptation that co-operatives undertake is rarely the same from one co-op to the next. Indeed, given differences in cultures between organizations, it is not sufficient to just copy structures. Rather, it is necessary to develop the concepts, processes and relationships that make things work. Modification and tailoring are key.<sup>22</sup> *Adaptation as Modified Importation and Copying*

Many people try many things, but the innovations that spread (both within and between organizations) are the ones that work. People can choose to promote innovation, but in the long run it is the environment that decides which innovations will succeed. This is a reason for experimentation and a reason for not undertaking adaptation by centrally driven, top-down approaches.

Using an analogy to genes, adaptation should be a matter of “reproduction” not of “preservation”. Just as genes do not try to reproduce themselves by preserving the host organism, people and societies should not attempt to reproduce the values they care about by trying to perpetuate the host organization unchanged. Instead, the goal is to reproduce the values, in every generation, by successful adaptations of the host organization. Looked at this way, failure is important (as is the analysis of failure). Sectors adapt in part by the failure (in one sense or another) of established institutions within them. Thus, if institutions are old or inflexible or maladapted, this is not a bad thing, since this provides a guide to others about how change should occur. Similarly, organizations adapt sometimes by the failure of old leaders, old ideas, older generations of members, and old organizational segments or structures. Organizational death is relevant; ecologies without death could not adapt.

These ideas can be applied fruitfully to co-ops. Most co-operatives do not take the lead themselves in making innovations or adaptations, but instead sit back and let others move first. Of course, not all attempts at innovation are successful. For a variety of reasons, attempts to adapt the structure or strategy of a co-operative, or to start a new co-operative, may be successful or unsuccessful. Unsuccessful adaptations and innovations tend to be forgotten, although sometimes they are remembered and resurrected at a later date when circumstances change. Successful adaptations, however, form the basis for additional innovations elsewhere.

As the co-operative’s innovations become recognized by others facing similar challenges, these strategies will be copied or imported elsewhere. The copying and the importation always involve some modification. This modification is essential, since the organization importing or copying the idea never faces the same set of circumstances that the original innovator faced.

A good example of this process can be found among NGCs. NGCs first emerged with the formation of American Crystal and were then copied by other farmers in the sugar beet industry. As the NGC model showed itself to be successful, it was adopted in other sectors and in other geographical locations by farmers facing similar issues. Each time, however, the structure was modified to fit the distinct needs of farmers in a particular area or a particular sector. For instance, U.S. Premium Beef was formed for very different reasons than was Spring Wheat Bakers. Although both co-ops were formed to add value to their members’ farming operations, U.S. Premium Beef was created to increase incomes by enhancing the quality of beef moving to the retail market, while Spring Wheat Bakers was formed to increase incomes by exploiting a growing segment of retail demand that was not yet full of large competitors.

Not only were subsequent NGCs formed for different reasons, they were formed via different mechanisms. For instance, Spring Wheat Bakers adopted a completely different approach to most NGCs, asking members for money to conduct an extensive study of market possibilities, rather than asking members for money to examine the feasibility of one or two options. Further alterations to the NGC model are also evident. For instance, in Kansas, the 21<sup>st</sup> Century Producers group has members invest in a fund that actively seeks out numerous investment opportunities in a wide variety of sectors before choosing one to develop. Thus, while the NGC model provides a structure that not only deals explicitly with the property rights issues that arise in co-ops, but also mirrors nicely the changes going on in agriculture, the NGC model is not monolithic and unchanging. Instead, this model has been adapted and modified to meet the needs of the farmers in a particular location or a particular market segment.

Thus, to summarize, the development of new co-operatives can be seen as local innovations that arise because of the need to adapt to particular instabilities and pressures. The successes of these new co-ops often create new models that can then be adopted by other farmers. This adoption involves other forms of adaptation and modification.

### *New Co-operatives Face*

#### *Specific Problems*

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While new co-operatives are often the source of new ideas and structures, the formation of new co-operatives is not automatic. There is a myth that co-operatives form on their own accord with no assistance from outsiders.<sup>23</sup> However, the reality is that co-operatives – and indeed any form of collective action – typically rely on a large support network at the time of their formation. The presence of this support network can be seen in historical examples. For instance, retail co-operatives and credit unions were created in Saskatchewan during the 1930s and 1940s with the assistance of Saskatchewan Wheat Pool field agents. These agents not only helped organize the co-ops, but also often provided the initial office space for the new organizations. Prior to this, the Saskatchewan Wheat Pool was itself a result of the efforts of outside individuals, including Aaron Sapiro, the California lawyer who was closely connected with the formation of many of the marketing co-ops in various parts of the U.S. The wheat pools were also promoted by farm leaders, pre-existing farm organizations, and politicians.

The need for external agents – those individuals who assist with the formation of a co-operative but are not directly associated with it – continues today. For instance, external agents – be they co-operative development officers, representatives from financial institutions, or university extension personnel – played a key role in the formation of the NGCs in Minnesota and North Dakota.<sup>24</sup>

External agents play a number of key roles in co-operative formation. At the most basic level, external agents help to solve some of the property rights problems that were identified above. For instance, external agents help to identify commonalities among the

members, thereby reducing the free rider problem, and they assist in the development of an understanding of the interdependencies that exist between members.

For instance, external agents often work to legitimize new and alternative models that may make perfect economic sense but that do not fit with what people have learned in school, from the media, and from their dealings with others. People need to come together as a group; they need a facilitator, adult educator/extension educator, or community developer to help them understand their strengths as a group and their place in larger socio-economic systems. Only on this foundation can business development proceed. This part is unlike a conventional business and suggests targeted action by external agents of an aspect that has typically been left to happenstance. There may be other respects in which co-ops need less help than other businesses, but at this one stage they need more.

Once a common purpose is defined, external agents also identify appropriate leaders for the group, assist in the identification of potential members, locate resources for business plans and industry analyses, and try to ensure that the co-op only proceeds if the outlook is reasonably favourable. While the external agents must have a good understanding of the emerging co-op, they must remain outside the co-op. Unless the external agents are able to remain external, they run the risk of imposing their ideas and beliefs on the co-op and depriving the members of control. Both of these are serious problems for the co-op. A clear sense of ownership is one of the ways of combating the property rights problems, and the imposition of ideas and beliefs by outsiders usually results in the co-op not appropriately responding to the problems it is facing.

### *Adaptation Can Be Difficult*

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While adaptation is necessary, organizations are rarely able to change successfully all at once. There are a number of reasons why adaptation can be difficult. An obvious reason is that people generally prefer that things remain the way they were, since it is costly to them as individuals to figure out the changes. Change is also costly because it involves new ways of doing things, new equipment, and new processes. Not only is new equipment, for instance, costly to install – e.g., production might be disrupted during installation – change means that new things have to be learned. Until this learning is complete, costs are often much higher than they once were.

There are also some more deeply structural reasons why change is resisted. For many members, the old structure is still providing substantial benefits. Changing to a new structure could represent a loss of benefits – e.g., the closing of a collection point nearby – or it could mean additional costs – e.g., the investment in new equipment at the farm level or additional training to meet new quality standards. Change is also resisted because although a new structure or a new activity could potentially benefit everyone, certain groups are worried that the benefits (or the costs) will not be distributed in such a way that they themselves actually come out ahead.

A change in the distribution of benefits and costs has other effects besides purely

economic ones. For some members, the new structure represents the result of a new political environment or a new value system within the co-operative, an environment in which some members now enjoy substantially less power and influence than they did previously. This loss of perceived power often translates into a reduced sense of ownership and control and a reduced commitment to the co-operative. As well, changes by the co-op often require new behaviour by the members – for instance, a shift in the location to which they haul their product. As members make the required changes in their activities, they often reevaluate their actions and their commitment to the co-operative. Members also begin to question the decisions made by management and to lose their confidence in these decisions. The case studies of Saskatchewan Wheat Pool, Tri Valley Growers and Dairy Farmers Group provide examples of co-ops where extensive change appears to have reduced member commitment, which in turn adversely affected the co-op.

Thus, the challenge facing co-operative managers is how to undertake change without destroying member commitment and confidence in the process, thus further exacerbating property rights problems. This is a difficult balancing act. In a number of instances, change is most required when the differences between members is large and/or growing. However, it is precisely these conditions – namely, a diverse membership – under which some members are likely to view change as a loss of control and ownership. The result is that co-operative managers have to move carefully in making changes and adapting to their altered environment. While not adapting can have unfortunate outcomes, so too can adaptation that is pushed forward without ensuring that there are benefits and without ensuring that the benefits of change are realized by the members.

### *Observations on Adaptation*

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The case studies summarized in Table 2 not only provide examples of co-operatives facing pressures for change, they also illustrate some of the ways in which co-operatives have adapted to the pressures they are facing. A number of key observations emerge from the analysis of the case studies and are summarized in Table 6.

The first observation is that some co-operatives have been able to adapt successfully to the internal and external changes they are facing. The co-operatives that have been successful are those who have been able to find some new differentiating feature (Naicam Co-op, Prairie Centre Credit Union), have been able to find a niche market in which to operate (U.S. Premium Beef, Spring Wheat Bakers), or have been able to focus on a set of core activities (United Sugars, Federated Co-operatives Limited, Burger King).

A second observation is that co-operative adaptation follows a pattern common to most other organizations. The key adaptations have occurred when specific co-operatives – led by specific individuals – tried a new organizational structure to deal with the problems they were facing. Examples of these key adaptations include the formation of American Crystal (which led the way for the other NGCs) and the formation of the super-locals (showing that it was possible for local co-operatives to provide a highly integrated set of services to their members). These key adaptations were then imported and copied

elsewhere; with each importation and copying a new adaptation was made.

Change is a difficult process and not all co-operatives are able to change or to make the right strategic decisions. For instance, change can often lead to a loss in the sense of ownership and control felt by members, which in turn often increases the problems the co-operatives are facing. The Saskatchewan Wheat Pool, Tri Valley Growers, and Dairy Farmers Group represent cases where change appears to have contributed to a reduced member commitment and confidence.

A third observation is that the property rights issues are real and must be addressed if co-operatives are to be successful. The introduction of tradable rights and contracting are some of the ways in which these property rights issues are solved. The solution of property rights problems, however, is never straightforward and involves other changes as well, including changes in membership composition and co-operative activity. Co-operatives that have encountered significant property rights issues include Cenex Harvest States and Farmland (see the case on United Country Brands), Saskatchewan Wheat Pool, Tri Valley Growers, and Dairy Farmers Group. Although the structure of NGCs addresses many of the property rights issues, the TriValley Growers case shows that merely introducing structural elements – e.g., growers' delivery rights – from the NGCs is not sufficient to solve the property rights problem. Instead, the co-operative must look at the entire package, a package that includes everything from marketing strategies to the decisions made regarding the state of the processing facilities. As well, as the example of American Crystal shows, as NGCs mature they may face a new property rights problem as maturing members attempt to remove their investment from the co-op.

A fourth observation is that co-operatives have been able to develop contractual relationships with other players in the agricultural sector, to provide farmers with information, and to use the information that farmers possess. U.S. Premium Beef, American Crystal, and United Country Brands are examples of co-ops that fit this category. Co-operatives, therefore, have proven that they can effectively respond to the industrialization of agriculture.

A final observation concerns an emerging innovation that is likely to be significant in the future. Although the proposed merger of Cenex Harvest States and Farmland to form United Country Brands did not proceed, the merger highlights a new organizational form – the umbrella co-op. United Country Brands was designed to be a holding co-operative – an organization under which a number of different activities could be carried out. Members, however, could opt for the activity areas with which they wanted to be associated.

The umbrella structure is an example of an innovative way to deal with increasing member heterogeneity, the need for focused sets of activities, and the need for a high degree of integration between members and the activities of the co-op. This structure is also being explored in Denmark through the so-called “co-operative strings” – an example of this form is found in MD Foods.

The umbrella co-op contains many elements of the network model discussed in the Introduction. In particular, the umbrella model – like the network – creates autonomous units that are able to concentrate on specific activities, while at the same time allowing common services to be shared. Such a structure should be able to generate a greater sense of membership, ownership and control, while still retaining the integration among the activities that is important in lowering costs. The development of the umbrella model is a good example of how organizational forms adapt to mirror the larger environment of which they are part. If the historical pattern of adaptation is any indication, this innovation will likely be copied and imported in many other co-ops in the future.

## CONCLUDING COMMENTS

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Co-operatives have historically played a very important role in agriculture by ensuring that markets remain competitive and by providing goods and services in situations where they would not otherwise have been provided. As the structure of agriculture changes, this role of co-operatives will remain. Given the current pressures within agriculture, the future of agriculture is expected to include greater corporate concentration and an increased presence of ownership or contract coordinated production-processing-distribution systems. The role of government will diminish in terms of income support and R&D, while the role of government will increase in terms of environmental and food health and safety regulations. Within this new agriculture, the need for the countervailing power of co-operatives will be as great as ever.

Co-operatives are also developing a new role, one in which they become a mechanism for farmers to actively invest in other stages of the food system. This new role actually goes beyond investment, since it involves farmers paying particular attention to product quality and to the coordination of activities throughout the food system.

The capacity of co-operatives – at least the traditional ones – to play a role in the agriculture that is emerging may be increasingly limited, however. Part of the reason is external to the co-op. The industrialization of agriculture means that players in the agricultural system must be able to offer differentiated products of top quality and to coordinate their actions with other players in the food system. Successful players also need to be able to access the key points of power within the food system – namely the consumer and the genetic information contained within agricultural inputs. Part of the reason that co-operatives face a more difficult role is related to factors internal to the organization. Increasing member heterogeneity and waning co-operative values means that co-operatives are facing problems with member commitment, capital acquisition and management.

The traditional co-operative – with its focus on activities that are close to the farm gate – is not well positioned to coordinate actions throughout the system. The traditional co-operative is also not well positioned to access the key points of power. In addition, the historical ability of co-operatives to supply a wide range of goods and services to what were once fairly homogeneous members within a geographical area is breaking down. As a consequence, co-operatives might well concentrate on and be very successful at their traditional core activities, yet find themselves more and more isolated from the location of the real power and profits in the agricultural system. The implications of this isolation include reduced earnings, greater difficulty in raising the capital required for a repositioning, and a loss of member integration with the co-op. This loss of integration manifests itself as a loss of commitment and a loss of membership, ownership and control. Members see the organization as being increasingly outside the mainstream industry and hence increasingly less worthy of their attention.

These challenges and pressures do not mean that co-operatives will disappear as an organizational form. However, they do mean that co-operatives must adapt and change. The evidence is strong that co-operatives can adapt and indeed have adapted. However, this adaptation is not uniform – some co-operatives are facing considerable pressures as they struggle to redefine themselves.

To be successful, co-operatives – and farmers in general – need to consider strategies that get them closer to the power centres defined by genetics and consumer preferences. More attention will have to be paid to scientific research and to social and marketing research. Since the costs of this research are enormous, co-ops will have to consider partnerships – be it with government, or producer organizations – who often have considerable resources because of the producer check-offs they administer, or with other co-ops.

Developing connections with other co-ops may be particularly important in the case of consumer co-operatives. Urban consumer co-operatives, where they exist, must be recognized as part of the increasingly integrated agri-food sector and as a key source of information. For instance, agricultural co-operatives should consider allying themselves with consumer co-operatives to research consumer preferences. The historical separation – and in some cases antagonism – between agricultural and consumer co-operatives needs to be rethought as the structure of agriculture changes.

Co-operatives will also have to respond by changing property rights (e.g., introducing tradable shares or moving to contractual arrangements with members) and by focusing on a specific set of activities. In undertaking these changes, co-operatives and their members have to remember that a co-op is defined by three sets of relationships: relationships among members; relationships among the activities the co-operative undertakes; and relationships between members and the co-operative activities.

To ensure a strong co-operative, the activities chosen will have to be closely integrated, otherwise the co-op will not enjoy economies of scale and/or scope. Co-operatives have to work to ensure that members perceive a high degree of integration between themselves. This can be done by making the membership more homogeneous, although by itself a homogeneous membership is not enough. Co-operatives also have to work at showing members how their actions and welfare are interdependent – in short, members have to develop some sort of common identity. As co-operatives develop this identity within their membership, they are at the same time creating an identity for themselves that is different from that of IOFs.

The co-operative also has to work hard to ensure that the activities chosen are closely integrated with the needs of the members and that members perceive a strong connection between the health and performance of their farming operations and the health and performance of the co-op. When members perceive a strong connection between the co-op and their farm, they will experience a greater sense of control and ownership. This, in turn, will lead to better monitoring of the co-op's performance and better management of the co-op. When members perceive a lack of connection they are less likely to take an interest in the affairs of the co-op, which typically leads to poorer performance, which in turn leads to a further weakening of member control and ownership.

The changes underway in agriculture and in co-operatives have a number of implications for policy. For the government, there is a need to examine the increasing market concentration and vertical integration underway in agriculture. One way to address this issue is through R&D spending. Research and development is critical to virtually every sector in the economy, creating power and influence. Yet, government is increasingly either backing out of funding R&D or it is partnering with private industry on R&D projects. What is needed is a solid and independent source of R&D funding that has its goal the rebalancing of power within the economy.

The government must also address co-operatives specifically. As collective enterprises, co-ops face particular problems when it comes to formation and adaptation. The government can assist these organizations by providing education and by facilitating the development process.

The need for innovation is also important for co-operatives. To ensure that the co-operative sector continually adapts, a source of experimentation within the co-operative system is essential. Since individuals are the key innovators and innovation is the key to successful adaptation, individual co-operatives must ensure that people in their organizations are able to suggest and try new ideas. The co-operative sector requires more sharing of ideas, whether it is within a co-op, between co-ops in the same sector, or across co-ops in different sectors or countries. The co-operative sector also requires more research – and the sharing of the resulting knowledge – than has typically been the case. Since much of the knowledge that is important to co-operative adaptation is contextual in nature, the research that is undertaken must facilitate the creation of this type of knowledge. Case study analysis is the usual way to convey knowledge of interdependencies and interrelationships; a focus should be made to conduct research of this type.

The co-operative sector also requires a healthy environment in which new co-operatives can form. New co-ops are particularly important as a source of innovation and new ideas, since new co-ops are much more likely to bring these forward than are existing organizations. As a result, the development of new co-operatives must be fostered. The fostering of co-op development is important, since co-operatives face numerous obstacles in the development phase that are not faced by other organizational forms. While these issues can be solved, they typically require outside facilitators that can assist in identifying common points of view and in illustrating the interdependencies among the members. Both the co-operative sector and the government have a responsibility to provide this development assistance. At all times, however, the assistance must be provided in such a way that the new co-ops are able to respond to the specific problems and issues they face and that the nature of the response is chosen by the group, rather than by outside players. At all times innovation must be encouraged.

The focus of this paper has been on the challenges facing agricultural co-operatives. The response of co-operatives to these challenges is important because of the impact this response will have on the individuals who make up the membership of the co-op – the farmers. The changes underway in agriculture are having significant impacts on farmers and farmers need a way to address the problems they are facing and to create new

opportunities. Farmers have traditionally used co-operatives as a means to do these things in the past – co-operatives have not been an end in themselves. If co-operatives do not adapt to the internal and external pressures that are currently building in the agricultural sector, the important loss will not be the institution itself, but rather the loss of a mechanism by which farmers can improve their well being.

Over the years, co-operatives have shown themselves to be adaptive organizations and the current situation is no different. Over the last 15 years, agricultural co-operatives have undergone many changes, many of which have been very successful. While co-operatives can operate successfully in the new agriculture that has emerged, this success is by no means guaranteed. To continue as an organizational form that can provide benefits to its members, co-operatives will have to continue to find ways of encouraging adaptation. Innovation must be encouraged, research must be undertaken, failures must be allowed and acknowledged, and new ideas must be suggested and tried.

## REFERENCES

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- Agrell, Per J. and Kostas Karantininis. 1999. Cooperatives' Merger Strategies: The MD Foods – Klover Maelk Case. Report. The Royal Agricultural University of Copenhagen.
- Agricore Co-operative Ltd. 1999. Annual Report.
- Bailey, Ann. 1995. Beet Business is Sweet. *Grand Forks Herald*. 8 December. Agriculture Section.
- Banda, Dennis. 1999. Presentation to the Institute of Co-op Studies. Montebello, Quebec. October.
- Boehlje, Michael. 1996. Industrialization of Agriculture: What are the Implications?, *Choices* 4: 30-33.
- Bol, Herman H.J. and Albert M. Dierick. 1990. The Co-operative Banking System in the Netherlands. Amsterdam: Netherlands Institut voor het Bank - en Effectenbedrijf.
- Boland, M., C. Freberg and D. Barton. 1999. Dakota Growers Pasta: The Acquisition. *Proceedings of the International Agribusiness Case Study Conference*, Wilfred Laurier University.
- Bonham, Kevin. 1999. Good news on the Rise: Spring Wheat Bakers growth Highlights Grains Conference. *Agweek Online*. 13 December. Retrieved 1 September 2000 from <http://www.agweek.com/docs/1213/1213grains.htm>.
- Bonisteel, Steven. 2000. Business-To-Barnyard Venture – Rooster.com. *BizReport*. 31 July. Retrieved 1 August 2000 from <http://www.bizreport.com/news/2000/03/200003-10/htm>.
- Burt, L. and M.E. Wirth. 1990. Assessing the Effectiveness of Farm Supply Co-operatives: A Comparison of Farmer and Manager Viewpoints. *Journal of Agricultural Co-operation* 5: 17-26.
- Buschena, David E. and Richard S. Gray. 1999. Trade Liberalization and International Mergers: The Case of Barley Marketing in North America. *Review of Agriculture Economics* 21,1: 20 -34.

- Canadian Co-operative Association. 1999. Nostalgia, optimism mark Agricore launch. *InterSector* 2:1,3.
- Cattle producers band together. 1996. @*griculture online*. 16 August. Retrieved 15 June 1999 from <http://www.agriculture.com/agnews/archive/no081196.html>.
- Cenex Harvest States. 1999. Annual Report.
- Clements, M. 1965. *By Their Bootstraps: A History of the Credit Union Movement in Saskatchewan*. Toronto: Clarke, Irwin and Company Limited.
- Cobia, D.W. 1997. New Generation Co-operatives: External Environment and Investor Characteristics. In *Co-operatives: Their Importance in the Future Food and Agricultural System*, ed. M. Cook, et al. Washington, D.C.: National Council on Farmer Co-operatives and The Food and Agricultural Marketing Consortium.
- Cook, M. 1994. The Role of Management Behavior in Agricultural Co-operatives. *Journal of Agricultural Cooperation* 9: 42-58.
- Cook, M.L. 1995. The Future of U.S. Agricultural Co-operatives: A Neo-Institutional Approach. *American Journal of Agricultural Economics* 77 (December): 1153-1159.
- Deckmyn, Dominique. 2000. B-to-B Bumper Crop. *The Global Food Exchange*. 31 July. Retrieved 31 July 2000 from <http://globalfoodexchange.com/gfeMar6.html>.
- Drabenstott, M. 1994. Industrialization: Steady Current or Tidal Wave? *Choices* Fourth Quarter: 4-8.
- Duffey, Patrick. 1997. TVG Changes Bear Fruit: Major Restructuring Effort Brightens Future for Tri Valley Growers. *Rural Co-operatives* September/October: 18-20.
- Elliott, Greg. 1998. Credit Union Service Delivery Model – Business Cases, CUCS Resolution 97-05. Regina: Credit Union Central of Saskatchewan.
- Evans, Simon. Milk rivals forced to consider merger. *The Australian Financial Review*. 5 September. Retrieved 5 September 2000 from <http://www.aft.com.au>.
- Ewins, Adrian. 1998. Agricore considers U.S. alliance. *Western Producer*. 3 December.
- Fairbairn, Brett. 1989. *Building a Dream: The Co-operative Retaining System in Western Canada, 1928-1988*. Saskatoon: Western Producer Prairie Books.
- Fairbairn, Garry Lawrence. 1984. *From Prairie Roots: The Remarkable Story of Saskatchewan Wheat Pool*. Saskatoon: Western Producer Prairie Books.

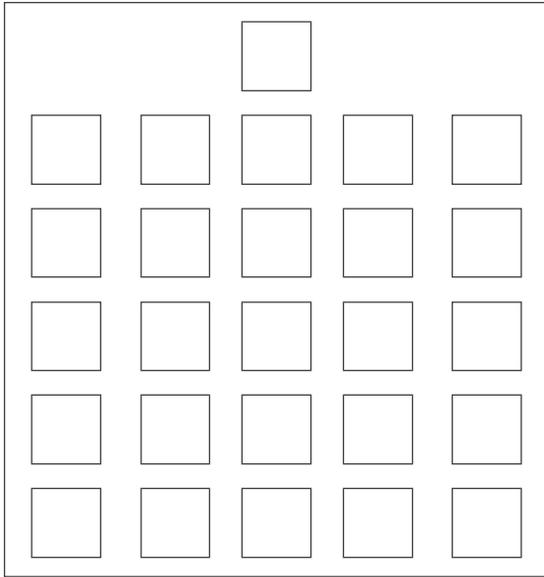
- Farmland Industries. 1999. Annual Report.
- Federated Co-operatives Limited. 1999. Annual Report.
- Federation of Danish Cooperatives. 1999. *Multiple String Co-operatives: Organization and Control of Differentiated Agricultural Production*. Translated by Gitte Shine. Copenhagen, Denmark.
- Ferrier, G.C. and P.K. Porter. 1991. The Productive Efficiency of U.S. Milk Processing Co-operatives. *Journal of Agriculture Economics* 42:161-173.
- Frith, Byran. 2000. Ill-considered Strategy a Detriment to Dairy Industry. *The Australian*. 18 August. Retrieved 25 August 2000 from <http://www.news.com.au>.
- Fulton, J.R. and W.L. Adamowicz. 1993. Factors That Influence the Commitment of Members to Their Co-operative Organization. *Journal of Agricultural Co-operation* 8: 39-53.
- Fulton, Murray. 1997. *Transformation of the Grains Industry in Western Canada*. Saskatoon: Centre for the Study of Co-operatives, University of Saskatchewan.
- Fulton, Murray. 1999. Co-operatives and Member Commitment. *The Finnish Journal of Business Economics* 4: 418-437.
- Fulton, Murray. 2000(a). Traditional versus New Generation Co-operatives. In *A Co-operative Approach to Local Economic Development*, N.Walzer and C. Merrett, eds. Westport, Conn.: Quorum Books.
- Fulton, Murray. 2000(b). A Systems Approach to the Challenges Facing Co-operative Education and Co-operatives. In *Canadian Co-operatives in the Year 2000: Memory, Mutual Aid and the Millennium*, Brett Fairbairn, Ian MacPherson and Nora Russell, eds. Saskatoon: Centre for the Study of Co-operatives.
- Fulton, M.E. and K. Giannakas. 2000. The Effects of Biotechnology on Concentration and Structure in the Agricultural Inputs Industry. A Discussion Paper Prepared for Agriculture and Agri-Food Canada. Ottawa. May.
- Fulton, Murray and James Vercammen. 1995. The Distributional Impacts of Non-Uniform Pricing Schemes for Co-operatives. *Journal of Co-operatives* 10: 18-32.
- Hakelius, K. 1996. *Co-operative Values – Farmers' Co-operatives in the Minds of the Farmers*. Dissertation No.23. Uppsala: Swedish University of Agricultural Sciences.

- Hammond Ketilson, L. and B. Fairbairn. 1994. Education and Training in North America, Co-operative. In *International Handbook of C-operative Organizations*, E. Dülfer ed. Gottigen: Vandenhoeck and Ruprecht.
- Hammond Ketilson, Lou, et al. 1998. *The Social and Economic Importance of the Co-operative Sector in Saskatchewan*. Saskatoon: Centre for the Study of Co-operatives.
- Hansmann, H. 1996. *The Ownership of Enterprise*. Cambridge, Mass.: Harvard University Press.
- Harris, A., B. Stefanson, and M. Fulton. 1996. New Generation Co-operatives and Co-operative Theory. *Journal of Co-operatives* 11: 15-28.
- Harris, Andrea and Murray Fulton. 2000(a). *The CUMA Farm Machinery Co-operatives*. Saskatoon: Centre for the Study of Co-operatives.
- Harris, Andrea and Murray Fulton. 2000(b). *Farm Machinery Co-operatives in Saskatchewan and Quebec*. Saskatoon: Centre for the Study of Co-operatives.
- Harris, Andrea and Murray Fulton. 1996. *Comparative Financial Performance Analysis of Canadian Co-operatives, Investor-Owned Firms, and Industry Norms*. Occasional Paper Series. Centre for the Study of Co-operatives. Saskatoon, Saskatchewan.
- Harvard Business School. 1998. MD Foods Amba. President and Fellows of Harvard College.
- Hind, A.M. 1997. The Changing Values of the Co-operative and Its Business Focus. *American Journal of Agricultural Economics* 79(4): 1077-1082.
- Hoffman, George. 1998. Restaurant Services, Inc. Miami, FL. Paper presented to the University of Minnesota.
- Holmlund, Mona and Murray Fulton. 1999. Networking for Success: Strategic Alliances in the New Agriculture. Centre for the Study of Co-operatives. Saskatoon, Saskatchewan.
- Holz-Clause, M. 1999. U.S. Premium Beef. In *New Generation Co-operatives Case Studies*. Illinois Institute for Rural Affairs. Macomb, IL: Western Illinois University.

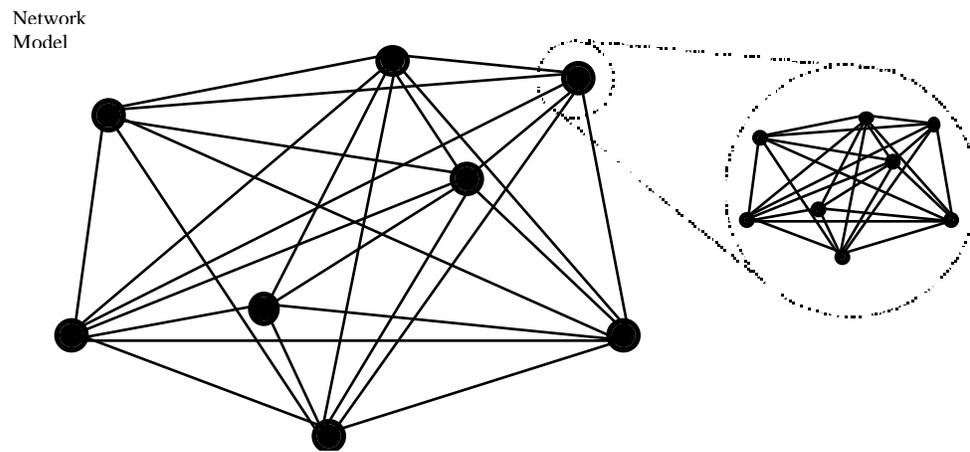
- Hunt, S.D. 1999. U.S. Premium Beef: A Beef Marketing Strategy for the Next Millennium. Paper presented at the U.S. Department of Agriculture's Agricultural Outlook Forum 1999. Arlington, Virginia. Retrieved 15 July 1999 from <http://www.usda.gov:80/agency/oce/waob/outlook99/99speeches.htm>.
- Jacobs, Jane. 2000. *The Nature of Economies*. Toronto: Random House.
- Johnson, Rona K. 1993. Minnesota Co-operatives join to form fourth-largest U.S. sugar supplier. *Journal of Commerce and Commercial* 398: 11A
- Kast, Fremont E. and James E. Rosenzweig. 1985. *Organization and Management: A Systems and Contingency Approach*. New York: McGraw-Hill.
- Kennett J., M.E. Fulton, P. Molder and H. Brooks. 1998. Supply Chain Management: The Case of a UK Baker Identity Preserving Canadian Milling Wheat. *Supply Chain Management: An International Journal* 3(3): 157-166.
- Lerman, Z. and C. Parliament. 1990. Comparative Performance of Co-operatives and Investor-Owned Firms in U.S. Food Industries. *Agribusiness* 6: 527-540.
- McNeill, Heather. 2000. Exclusive Relationships in the Agri-Food Sector. Unpublished M.Sc. Thesis, Department of Agricultural Economics, University of Saskatchewan, Saskatoon.
- Mintzberg, H. 1999. Ornigraphs: Drawing How Companies Really Work. *Harvard Business Review* (September-October): 87-94.
- Mitchell, Sue. 2000. Milk Floats Delayed as Earnings Suffer. *The Australian Financial Review*. 24 August. Retrieved 25 August 2000 from <http://www.afr.com.au>.
- Modesto, Richard Estrada. 1998. Fight for Survival: Tri Valley Co-op Returns to Basics to Stem its Losses. *The Sacramento Bee*. 22 August. Retrieved 31 July 2000 from <http://www.newslibrary.com/deliverppdoc.asp?SMH=490818>.
- Parliament, C., Z. Lerman, and J. Fulton. 1990. Performance of Co-operatives and Investor-Owned Firms in the Dairy Industry. *Journal of Agricultural Co-operation* 5:1-16.
- Plunkett, Brad. 2000. Scope for Expanding the Economic Contribution of Agriculture Trading Co-operatives in WA. Economics and Policy Group, Department of Agriculture, Western Australia.
- Porter, P.K. and G.W. Scully. 1987. Economic Efficiency in Co-operatives. *The Journal of Law and Economics* XXX: 489-512.

- Quebec Industrie et Commerce. 2000. Survival Rates of Cooperatives in Quebec. Ottawa: Cooperatives Secretariat.
- Rance, Laura. 1998. Agricore Doesn't Want to be Big, Just Big Enough. *The Manitoba Co-operator*. 8 December.
- Ravoet, G. 1994. The Challenge Facing European Co-operative Banks. *The World of Co-operative Enterprise*. Plunkett Foundation.
- Reynolds, Bruce J. 1997. *Decision-Making in Co-operatives with Diverse Member Interests*. U.S. Department of Agriculture, Rural/Business/Co-operative Service.
- Reynolds, Bruce J. 1999. The One Member-One Vote Rule in Co-operatives. Presentation to Farmer Co-operatives 2000: Excelling in Governance.
- Richards, Timothy J., K.K. Klien and A. Walburger. 1998. Principal-Agent Relationships in Agriculture Co-operatives: An Empirical Analysis from Rural Alberta. *Journal of Co-operatives* 13: 21-34.
- Rogers, R.T. and B.W. Marion. 1990. Food Manufacturing Activities of the Largest Agricultural Co-operatives: Market Power and Strategic Behavior Implications. *Journal of Agricultural Co-operation* 5:59-73.
- Saskatchewan Wheat Pool. 1999. Annual Report.
- Schmidt, Mayo. 2000. Pool Announces Third Quarter Results. Regina: Saskatchewan Wheat Pool. 21 June.
- Schnitt, Paul. 2000. Co-op's Problems Deeply Rooted: Tri Valley Fell Hard for Various Reasons. *The Sacramento Bee*. 24 July. Retrieved 31 July 2000 from <http://www.sacbee.com/news/tools/printify.cgi>.
- Schrader, L.F., et al. 1985. *Co-operative and Proprietary Agribusiness: Comparison and Performance*. Research Bulletin 982, Purdue University.
- Seipel, Michael F. and William D. Heffernan. 1997. Co-operatives in a Changing Global Food System. United States Department of Agriculture. Rural Business-Co-operative Service. RBS Research Report 157.
- Sexton, R.J. 1986. The Formation of Co-operatives: A Game Theoretic Approach with Implications for Co-operative Finance, Decision Making, and Stability. *American Journal of Agriculture Economics* 68, 2: 214-225.

- Sexton, R.J. and J. Iskow. 1993. What do we know about the Economic Efficiency of Co-operatives: An Evaluative Study. *Journal of Agricultural Co-operation* 8: 15-27.
- Smith, E., ed. 1997. Beef producers buy 50% of Farmland National Beef Packing Co. *Lean Trimmings*. 4 August. Retrieved 14 June 1999 from <http://www.hooked.net/users/nma/lt8-4.htm>.
- Staatz, J.M. 1983. The Co-operative as a Coalition: A Game-Theoretic Approach. *American Journal of Agricultural Economics* 65, 5: 1084-89.
- Stefanson, Brenda. 1999. Adult Education in Co-operative Development: Agents of Change. Master's thesis, University of Saskatchewan.
- Torgerson, Randall E., Bruce J. Reynolds and Thomas W. Gray. 1998. Evolution of Co-operative Thought, Theory and Purpose. *Journal of Co-operatives* 13: 1-20.
- United Spring Wheat Processors Co-op Organized. 1996. *Prairie Grains* 2. Retrieved 1 September 2000 from <http://www.smallgrains.org/Springwh/May96/USWP1.htm>.
- United Sugars Opens Refining Plant. 1998. *Candy Industry* 1 Oct: 62.
- United Sugars to Market Corn Sweeteners. 1995. *Prepared Foods* 164: 94.
- USWP To Enter Frozen Dough Business. 1997. *Prairie Grains* 10. Retrieved 1 September 2000 from <http://www.smallgrains.org/Springwh/Nov97/USWP.htm>.
- Vercammen, J., M. Fulton and C. Hyde. 1996. Nonlinear Pricing Schemes for Agricultural Co-operatives. *American Journal of Agricultural Economics* 78, 3: 572-84.
- Williams, Norman D. 1998. Major Changes made at Tri Valley Growers, Estimated \$79 Million Loss Forces Moves. *The Sacramento Bee*. 22 August. Retrieved 31 July 2000 from <http://www.newslibrary.com/deliverppdoc.asp?SMH=161018>.
- Zeuli, K.A. and R.P. King. 1998. A Model Assessing Alternative Organizational Forms For Value-Added Enterprises. Paper presented at the American Agricultural Economics Association Annual Meeting, August 2-5, Salt Lake City, Utah.
- Ziegenhorn, Randy. 1999. *Networking the Farm: The Social Structure of Co-operation and Competition in Iowa Agriculture*. Brookfield: Ashgate.



**FIGURE 1** TRADITIONAL ORGANIZATIONAL STRUCTURE



**FIGURE 2** THE NETWORK ORGANIZATIONAL MODEL

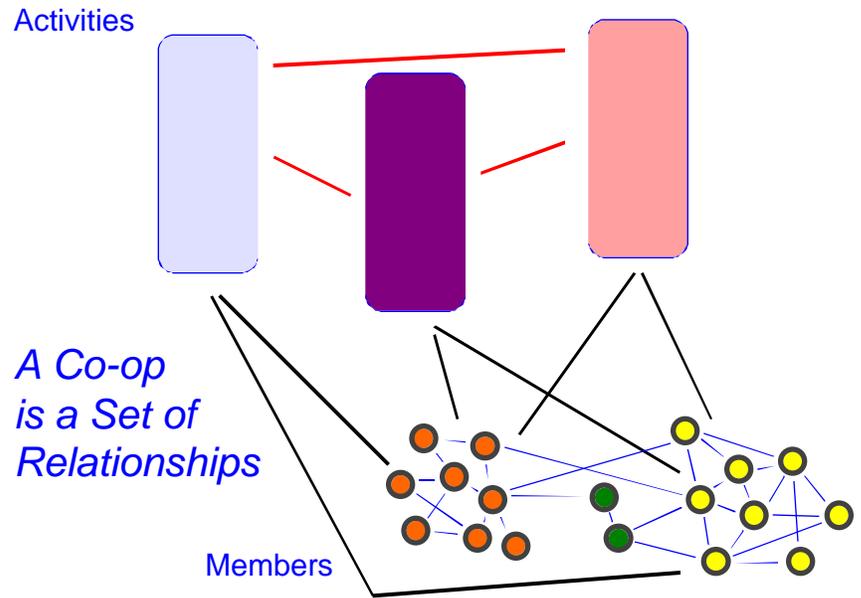


FIGURE 3 THE CO-OPERATIVE AS A SET OF RELATIONSHIPS

**TABLE 1 PATTERNS OF CO-OPERATIVE CHANGE AND EXAMPLES OF CO-OPS**

<b>Pattern</b>	<b>Examples of Co-operatives</b>
<b>Pattern I</b> – The fastest growing co-operatives	<ul style="list-style-type: none"> <li>• New Generation Co-operatives – American Premium Beef</li> <li>• Super-Locals – Naicam Co-operative, Prairie Centre Credit Union</li> <li>• Food Franchise Co-operatives – Burger King</li> <li>• CUMAs</li> </ul>
<b>Pattern II</b> – Co-operatives under stress and managing stress	<ul style="list-style-type: none"> <li>• Large, centralized and multipurpose co-operatives currently under stress – Tri Valley Growers, Dairy Farmers Group (Australia), Saskatchewan Wheat Pool</li> <li>• Co-operatives that have successfully focused on core activity: American Crystal Sugar, FCL</li> </ul>
<b>Pattern III</b> – Mergers and acquisitions	<ul style="list-style-type: none"> <li>• Agricore</li> <li>• United Country Brands</li> <li>• MD Foods/Klover/Arla (Denmark/Sweden)</li> </ul>
<b>Pattern IV</b> – Declining member commitment	<ul style="list-style-type: none"> <li>• Saskatchewan Wheat Pool</li> <li>• Tri Valley Growers</li> </ul>
<b>Pattern V</b> – Geography less of a common bond	<ul style="list-style-type: none"> <li>• United Sugars</li> <li>• Rooster.com</li> <li>• Rabobank</li> </ul>

**TABLE 2 SUMMARY OF CASE STUDIES**

Co-op	Summary
U.S. Premium Beef	<p>U.S. Premium Beef (USPB) “provides U.S. beef producers an opportunity to retain ownership of the beef they produce from the ranch to retail.” Over 1,350 producers from 33 states have marketed more than one million cattle through USPB.</p> <ul style="list-style-type: none"> <li>• Example of a focus on a single activity</li> <li>• Growing importance of non-geographical factors</li> <li>• Importance of coordination and information in providing extra value in the system and the role of contracts in coordination</li> <li>• Strategic alliance with a large traditional co-operative (Farmland) as an important element.</li> </ul>
American Crystal Sugar	<p>Owned by approximately 2,900 grower shareholders in the Red River Valley of North Dakota and Minnesota, American Crystal Sugar is the largest sugar beet processor in the U.S. American Crystal was formed in 1973 when the existing processor exited the industry.</p> <ul style="list-style-type: none"> <li>• As the first New Generation Co-operative (NGC), American Crystal has served as a model for NGC formation and development</li> <li>• Evidence of efficiency gains related to NGC characteristics such as the Quality Payment System</li> <li>• Entering a later phase in maturity, American Crystal Sugar is now facing issues surrounding the transfer of member equity</li> </ul>
Naicam Co-op	<p>Located in rural Saskatchewan, Naicam Co-operative has developed from a traditional retail co-operative into a highly successful "super-local" providing a variety of integrated agricultural services to the surrounding communities.</p> <ul style="list-style-type: none"> <li>• Differentiation from other businesses based on offering a large number of highly integrated services in single geographical location</li> <li>• A focus on expanding the value of the co-operative to the membership by integrating members into the process of transformation</li> <li>• Original and innovative activities and strategies are being replicated elsewhere</li> </ul>
Prairie Centre Credit Union	<p>Prairie Centre Credit Union, headquartered in Rosetown, Saskatchewan, was established in 1993 after intense negotiations and discussions between the rural credit unions in Beechy, Eston, Outlook, Elrose and Rosetown.</p> <ul style="list-style-type: none"> <li>• Voluntary grouping of five rural credit unions, creating a “superlocal” while maintaining meaningful local control.</li> <li>• Development of a new model for the delivery of credit union products and services.</li> </ul>
Burger King	<p>In the fall of 1991, Burger King restaurant operators created a purchasing co-operative – Restaurant Service, Inc. – which is responsible for purchasing core food, packaging products, kitchen equipment, uniforms, décor and discretionary services for all Burger King restaurants.</p> <ul style="list-style-type: none"> <li>• Co-operation among non-farm individuals not bound by a common geographical location</li> <li>• The co-operative model as a mechanism of reducing transaction costs involved in supply chain management.</li> </ul>
Tri Valley Growers	<p>Tri Valley Growers is a canned fruit processing co-operative comprised of 500 grower members from the San Francisco Bay Area (Northern California). Tri Valley Growers is the largest multi-commodity co-operative in the U.S.</p> <ul style="list-style-type: none"> <li>• Failure of members to understand the risk and rewards of ownership in a co-op resulted in a failure to adequately capitalize the company</li> <li>• Capital acquisition problems, that may be an indicator of property rights issues, prevented the modernization of equipment and plants</li> <li>• Loss of focus and faulty assumptions about the market led to extensive changes in management</li> </ul>

Dairy Farmers Group (Australia)	<p>Dairy Farmers Group (DFG) is a large Australian dairy processing co-operative that has grown very quickly through acquisitions.</p> <ul style="list-style-type: none"> <li>• Market deregulation, increased competition and concentration in the dairy industry led to mergers, acquisitions and restructuring.</li> <li>• Poorly defined property rights and expansion exacerbated capital acquisition issues leading to a proposed restructuring towards a PLC</li> <li>• Failure to define property rights, through delivery rights or a separate class of shares for those supplying higher value milk, is creating pressures to secure a large share of the premium market.</li> <li>• Extensive change hampers the movement towards successful adaptation</li> </ul>
Spring Wheat Bakers	<p>Formed in 1996, Spring Wheat Bakers (SWB) is a NGC of approximately 2,700 spring wheat producers from across North Dakota, South Dakota, Minnesota and Montana. SWB manufactures frozen dough and frozen partially-baked products at its plant in McDonough, Georgia.</p> <ul style="list-style-type: none"> <li>• Thoroughly investigated all the options for value-added spring wheat processing before engaging in a business development strategy</li> <li>• Large geographic distribution of its members allows SWB to access the highest quality wheat.</li> <li>• Instead of locating inside of its member region, the manufacturing plant is strategically placed near the largest consumer market</li> </ul>
Federated Co-operatives Limited (FCL)	<p>Federated Co-operatives Limited (FCL) provides central wholesaling, manufacturing and administrative services to approximately 300 locally-owned retail co-operatives in Western Canada.</p> <ul style="list-style-type: none"> <li>• Withdrawal from secondary manufacturing activities</li> <li>• Tight focus of co-operative on core lines of business</li> <li>• No mergers, joint ventures or alliances</li> </ul>
CUMA Machinery Co-ops	<p>The CUMA -- Cooperative d'Utilisation de Materiel Agricole -- loosely translated as "co-operative for the use of farm implements," is a new model of farm machinery co-operative spreading throughout Quebec and Ontario.</p> <ul style="list-style-type: none"> <li>• Response to narrowing profit margins of commodity production and economies of scale in machinery use</li> <li>• The umbrella or multiple fingers model allows the flexibility necessary to meet diverse member equipment requirements</li> <li>• Contractual relationship between the members and the co-operative minimizes free-rider behaviour</li> </ul>
Saskatchewan Wheat Pool (SWP)	<p>SWP is Saskatchewan's largest business, Canada's largest grain handler and one of its largest co-operatives. Through extensive diversification, the Pool has five business segments: grain handling/marketing, farm supplies, livestock marketing, agri-food processing, and publishing.</p> <ul style="list-style-type: none"> <li>• Diverse activities that are not closely integrated</li> <li>• Loss of commitment</li> <li>• Difficulties in implementing change</li> </ul>
Agricore	<p>Agricore was formed in 1998 through the merger of the Alberta and Manitoba Wheat Pools. It now serves nearly 80,000 members in Canada's four western provinces.</p> <p>A merger prompted by a number of the trends in the grain handling industry</p>
United Country Brands	<p>United Country Brands is the name given to the proposed merger between Cenex Harvest States and Farmland Industries. The new organization was anticipated to have projected sales of nearly \$20 billion.</p> <p>New model characteristics – multiple string co-operatives  Finding coherence in a large organization  Mergers and acquisitions</p>

MD/Klover Foods	<p>The Danish dairy co-operative MD Foods is an example of a truly international agriculture co-operative. MD Foods sells its products worldwide and in 1999 merged with the Danish co-operative Klover Maelk and the Swedish co-operative Arla.</p> <ul style="list-style-type: none"> <li>• Mergers and international expansion enables competitiveness through economies of scale in R&amp;D, market power to consolidate relationships with a concentrated retail industry, cost efficiencies and the minimization of the threat of foreign takeover.</li> <li>• Private and branded labels and product innovation as a differentiating strategy</li> </ul> <p>The multiple string model is utilized to distinguish between members supplying differentiated raw materials</p>
United Sugars	<p>United Sugars Corporation, the largest beet sugar marketer in the United States, is the result of an alliance between three NGCs and two non-co-operative enterprises. United Sugars' share of the U.S. sugar market is approximately 25 percent.</p> <ul style="list-style-type: none"> <li>• Non-geographically defined corporation comprised of co-operative and non-co-operative enterprise</li> <li>• Highly focused on an integrated single activity</li> <li>• Utilization of information technologies to reduce transaction costs, increase efficiency and monitoring capabilities</li> </ul>
Rooster.com	<p>On the first of May 2000, a new and highly innovative web-based e-business, Rooster.com, was launched by Cenex Harvest States Co-operative, Cargill Inc., and DuPont.</p> <ul style="list-style-type: none"> <li>• Service based on a common economic interest rather than a common geographical location</li> <li>• Information technology and e-business promotes closer relationships between farmers, suppliers and marketers</li> <li>• Combines the economies of scale associated with national level operations and the responsiveness of local dealers.</li> </ul>
Rabobank	<p>Rabobank, headquartered in The Netherlands, was formed in 1972 through the merger of two co-operative bank central organizations. Rabobank has established an international network of offices to support Dutch companies doing business abroad and has 90 offices in 30 countries.</p> <ul style="list-style-type: none"> <li>• Growing importance of non-geographical factors</li> <li>• International expansion</li> </ul>

**TABLE 3** COMPARISON OF TRADITIONAL AGRICULTURE WITH THE ‘NEW’ AGRICULTURE

<b>Traditional Agriculture</b>	<b>‘New’ Agriculture</b>
• Commodities; spot markets	• Differentiated products; negotiation; contracts
• Farms carry out many activities	• Specialization; separation of production stages
• Product chain stages seen as independent	• Focus on a system; stages seen as interdependent
• Price and production risk	• Relationship risk; food health and safety
• Concerns about monopoly pricing	• Concerns about access to information
• Money and assets prime source of control	• Information as prime source of control

Source: Adapted from Boehlje.

**TABLE 4** COMPARISON OF TRADITIONAL AGRICULTURE WITH TRADITIONAL CO-OPS

<b>Traditional Agriculture</b>	<b>Traditional Co-ops</b>
• Commodities; spot markets	• Sell generic products to members on demand
• Farms carry out many activities	• Multi-purpose co-ops serving diverse members
• Product chain stages seen as independent	• Co-ops concentrated near the farm level
• Price and production risk	• Major supporters of government price supports
• Concerns about monopoly pricing	• ‘Competitive yardstick’; co-ops source of countervailing power
• Money and assets prime source of control	• Investment in physical capital; little investment in intellectual capital

**TABLE 5** COMPARISON OF 'NEW' AGRICULTURE WITH 'NEW' CO-OPS

<b>'New' Agriculture</b>	<b>'New' Co-ops</b>
• 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

**TABLE 6**    **EXAMPLES OF SUCCESSFUL CO-OPERATIVE ADAPTATIONS**

<b>Adaptation</b>	<b>Examples of Co-operatives With this Adaptation</b>
New differentiating feature	Naicam Co-op, Prairie Centre Credit Union
Specialization, narrow product scope	American Crystal, Federated Co-operatives Limited, Burger King, CUMAs
Operate in niche markets	U.S. Premium Beef, American Crystal
Contractual relationship with members	U.S. Premium Beef, American Crystal, United Country Brands, CUMAs
Device for farmers to network with the rest of the system	U.S. Premium Beef, United Country Brands, United Sugars
Vehicle for farmers to avoid relationship risk	American Crystal
More attention paid to providing farmers with information	American Crystal, U.S. Premium Beef, Rooster.com
More attention paid to using the information farmers possess	American Crystal, U.S. Premium Beef
Umbrella or holding type co-operative	United Country Brands, CUMAs

## NOTES

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<sup>1</sup> New Generation Co-ops (NGCs) are formed to process the agricultural products of their members. NGCs have a number of distinctive characteristics, including tradable equity shares linked to delivery rights and large up-front capital investment by members. See Harris, et al. (1996) and Fulton (2000a) for details on the NGC model.

Super-locals are local co-ops that have typically leased or otherwise consolidated the facilities of neighbouring co-ops. In addition to covering a larger geographical area, these co-ops have typically developed a set of integrated services (e.g., soil testing, custom seeding, custom spraying, custom harvesting) along with the traditional activities such as petroleum sales and farm supplies (and, as is the case in the U.S., grain handling).

Food franchise co-ops are co-operatives formed by food operators such as restaurants. The report presents the case of Burger King restaurants forming a co-operative. Other examples include co-ops formed by Dairy Queen restaurants and grocery stores.

<sup>2</sup> Mintzberg provides an analysis of organizations that is highly consistent with this network model.

<sup>3</sup> This quote is taken from Boehlje (1996) p. 30. The changes in agriculture described in this section are taken largely from Boehlje (1996) and Drabenstott (1994).

<sup>4</sup> Fulton and Giannakas (2000) provide an overview of the impact of agricultural biotechnology on concentration in the agricultural inputs industry.

<sup>5</sup> While all co-operatives are not successful at start-up, there is some evidence that co-operative start-ups are more successful than start-ups by other types of firms. A recent study in Quebec provides a comprehensive study of co-operative formation in that province. The findings of that report indicate that a higher percentage of co-operatives make it past the start-up phase than do investor-owned firms. See Quebec Industrie et Commerce (2000).

<sup>6</sup> Fulton (1999) argues that start-up co-operatives are able to resist predatory pricing by IOFs if member commitment is high.

<sup>7</sup> 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 the 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 difference in risk preferences in turn can result in a preference for co-ops versus IOFs (Zeuli and King, 1998). Farmers may also differ in their ability to access capital or in their discount rates. Either of these factors could also result in a differential preference for investment in a value-added enterprise (via a co-operative) versus a market transaction with an IOF.

<sup>8</sup> For a more complete discussion of member heterogeneity and the strategies available to co-operatives to address this problem, see Reynolds (1997, 1999). The issue of member heterogeneity has generally received substantial attention in the co-operative literature. See for example, Staatz (1983), Sexton (1986), Fulton and Vercammen (1995), and Vercammen, et al. (1996).

<sup>9</sup> See Porter and Scully (1987) and Ferrier and Porter (1991) for the argument that co-operatives are inefficient organizations.

<sup>10</sup> See, for instance, Schrader et al. (1995), Lerman and Parliament (1990), Parliament, et al. (1990), and Harris and Fulton (1996). Sexton and Iskow (1993) provide an overview of the proposition that co-operatives are less efficient than IOFs and provide empirical evidence to suggest that they are not.

<sup>11</sup> A more comprehensive review would also point out that better defining individual property rights to the capital invested in an organization may actually be counter productive to achieving members' objectives. Co-operatives are often set up to address market failures – for instance, the failure of for-profit firms to price a product competitively or to provide certain types of services. Making the property rights in a co-op more like those in an IOF can be expected to lead to the organization behaving more like an IOF. Specifically, once benefits are allocated on the basis of capital invested rather than use, the large shareholders will have an incentive to direct the management in the organization to increase shareholder value, rather than meeting the needs of the members themselves. For a property rights theory that outlines the conditions under which it is advantageous for the users of an organization to become the shareholders, see Hansmann (1996).

<sup>12</sup> See Cook (1994) for a more detailed discussion of the challenges facing co-operative managers.

<sup>13</sup> Hammond Ketilson and Fairbairn (1994) provide details on co-operative training programs. A partial list of the development, extension, and research centres in Canada and the U.S. that play the roles outlined in the text is provided in Fulton 2000(b). This list gives testimony to the resources and effort that co-operatives and their members have put into education.

<sup>14</sup> Firms may also be getting larger because they hope to leap-frog others to become the dominant firm. For instance, a firm may use an escalation strategy in which it spends large amounts on R&D to achieve a dominant position. Escalation can be a profitable strategy when there is a high degree of substitutability with competitors' products on the demand side and there are scope economies on the supply side. Both of the factors required for an escalation strategy are present in the agricultural biotechnology industry. On the supply side, intellectual property – e.g., the isolation of a gene that provides particular advantages and which can be inserted into a number of crops – means there are scope economies. There are also clear scope economies associated with the enabling technologies that are required to use these genes. And on the demand side, herbicide and insect resistant seeds and the accompanying chemicals are clearly a substitute product for traditional seeds and herbicides and pesticides. One example of a firm that appears to be following this escalation strategy is Monsanto, although Dow and others are following somewhat similar strategies. See Fulton and Giannakas (2000).

<sup>15</sup> See, for instance, Buschena and Gray who document the mergers that occurred in the North American malting industry after the signing of the North American Free Trade agreement.

<sup>16</sup> This strategy is outlined in Kast and Rosenzweig (1985).

<sup>17</sup> See Rogers and Marion (1990).

<sup>18</sup> See Torgerson, et al. (1998) and references therein for a discussion of the “competitive yardstick” theory.

<sup>19</sup> Boland, et al. provide an overview of the formation of Dakota Growers Pasta (DGP). The institutional innovation of closely linking the production of durum, the milling of durum into semolina and the production of pasta from the semolina is suggested as being one of the elements of DGP success.

<sup>20</sup> Heather McNeill (2000) provides a discussion of the link between commitment and the purchase of delivery shares in her M.Sc. thesis.

<sup>21</sup> Fulton (2000a) provides a overview of the differences between traditional co-ops and NGCs.

<sup>22</sup> Many of the ideas about innovation and adaptation that are explored in this chapter were developed as a result of reading Jane Jacobs's (2000) book *The Nature of Economies*.

<sup>23</sup> This myth is succinctly captured and perpetuated in the title *By Their Bootstraps*, a book on the history of the credit union movement in Saskatchewan (Clements, 1965).

<sup>24</sup> Stefanson (1999) outlines the role played by external agents in her thesis "Adult Education in Co-operative Development: Agents of Change." Ziegenhorn (1999) also highlights the idea of external agents as key components of the development process in his book *Networking the Farm*. While the groups he describes being organized were not co-operatives, but rather farmer networks, the observation that an external agent is required to facilitate the process remains key.

## **CASE STUDIES**

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The co-operatives that are described on the following pages are examples of organizations that fit the patterns of adaptation outlined in the main report. While the case studies fit the general patterns that have been outlined, there is also considerable variation in the problems facing these co-operatives and the manner in which these co-operatives have addressed the challenges. Thus, another purpose of these case studies is to provide some contextual details on the pressures faced by co-ops and to show how co-ops have responded to the pressures. As is argued in the main report, adaptation is always a local response to local problems – the co-operatives highlighted here illustrate this point very well.

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## WARBURTON'S LTD. – AN EXAMPLE OF THE NEW AGRICULTURE

### KEY POINTS

- Change from a commodity to a differentiated product
- Changing consumer tastes
- Interdependence of production and marketing stages
- Contracts
- Access to information
- Trust and relationship risk.

Warburton's Ltd. is a century-old family firm and Britain's largest independent bakery, producing more than 3 million loaves of bread a week. Warburton's bread is known to be high-quality – it retails at twice the price of a regular loaf. To guarantee this quality, Warburton's has always used Canadian Western Red Spring (CWRS) wheat. However, in the late 1980s, they began to notice a decline in quality, which threatened their ability to attract premium prices for their bread. Their research revealed that particular varieties of CWRS – specifically Teal, Pasqua and Columbus – worked best in their bread-making system, producing bread better suited to their customers' tastes.

To ensure that they would obtain only these desired varieties, Warburton's began discussions with the Canadian Wheat Board (CWB) to use "identity-preserved contracts" to source specific varieties of wheat. The contracts that were agreed to are administered by Agricore (formerly Manitoba Pool Elevators) and Paterson Elevator Co. Warburton's specifies the amount of wheat it requires – well over one hundred thousand tonnes annually – and the elevator companies are responsible for obtaining it from Manitoba farmers through production contracts. Warburton contracts are awarded annually to farmers who have a reputation for growing consistently good quality CWRS crops.

Under the contract, farmers agree to produce a particular variety. Crops have to be grown from certified seed and the farmer must employ good practices to grow the crop and to store and protect the harvest. The producer also submits a report on weather conditions, use of inputs and crop yield, along with a sample of the wheat. If the elevator company is satisfied, they agree to purchase the entire crop. In reality, detailed tests on every sample are not practical, so trust and reputation are very important – contracts tend to be awarded to long-standing members and customers. In return for meeting these standards, farmers receive a \$20 per tonne premium over the regular CWB price for identical grain. This premium is paid in cash, direct from Warburton's, along with the regular CWB payment.

For their part, Warburton's accepts all the contracted wheat that meets the agreed-upon standards. They buy direct from CWB and are charged more to cover any additional administrative or logistical costs, particularly in the handling. Shipments of Canadian wheat are exported to Warburton's every six to eight weeks, and the elevator companies have to ensure that the wheat is "identity preserved" – i.e., maintains the correct characteristics and remains separate from other varieties – through the entire grain-handling system. Warburton's pays a management fee to the elevator companies for administering contracts and preserving the identity of the wheat through shipment.

Warburton's has set up a research lab and pilot bakery in Brandon, MB where they conduct their own quality tests, refine their baking technology, and experiment with new wheat varieties and combinations. The technical centre is also in constant contact with the elevators and the producers as they approve shipments based on their analysis of the harvest sample and the farmer's report.

### SOURCES

Kennett J., M.E. Fulton, P. Molder and H. Brooks. 1998. Supply Chain Management: The Case of a UK Baker Identity Preserving Canadian Milling Wheat. *Supply Chain Management: An International Journal* 3(3): 157-166.

## PROPERTY RIGHTS PROBLEMS

### KEY POINTS

Property rights problems in co-operatives are incentive problems associated with providing members with a strong degree of ownership and control

There are a number of property rights problems that have been identified in co-operatives.

**THE FREE-RIDER PROBLEM** – The free rider problem is a collective or group action problem. It emerges in situations where individuals in a group, acting in their own interest, undertake actions that are not in the best interest of the group as a whole. The free rider problem exists when there are strong interdependencies between the decisions made by each individual.

A key place where the free rider problem exists in co-ops is in capital formation. Individual members have very little incentive to invest in a co-operative because each member knows that they would be better off if they could simply use the co-operative without having to contribute capital – i.e., each member knows that they would be better off if they could simply “free ride” on the capital contributed by others. The result is that members will only invest as much as is required for them to patronize the co-operative. However, when all members act in this way, the co-operative will be short of capital and will have to find other ways of raising it.

The free rider problem operates in co-operatives in other ways. For instance, an increasingly important issue in many co-ops is the need for the co-op to have a consistent volume or a consistent quality of product delivered by its members. This consistency is important in order for the co-op to be able to compete effectively – e.g., lower costs, obtain new markets – in the new agriculture described above. Yet obtaining this consistency of volume or quantity is difficult for the co-op if the members are not contractually required to deliver the product. Without the contractual requirement, members are often prone to deliver their product to whichever company provides the best price on the day. The practice of delivering to the company with the best short-term price without considering the long term consequences is an example of the free rider problem.

**THE HORIZON PROBLEM** – Co-operatives are prone to inefficiencies because of the limited patronage horizon of co-operative members. Once again the issue is one of incentives. Since members can only receive a return on their investment through patronage refunds when they actually use the co-operative, it is argued that 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.

**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.

### SOURCES

Cook, M.L. 1995. The Future of U.S. Agricultural Co-operatives: A Neo-Institutional Approach. *American Journal of Agricultural Economics* 77 (December): 1153-1159.

**IDEOLOGY**

**CLASSIC DEFINITION** – Vision of a desired future and a pattern of action to reach it. Under this view, ideology is probably a necessary condition of any group action – it is not a marginal, sectarian, or extremist phenomenon. Ideology is something that is created (or re-created), not something that just happens. Thus it is not enough to say that ideology is a thing of the past or that ideology is declining. Past co-operative leaders found ways to articulate ideologies that connected their co-ops to their members. Future leaders will find different ideologies that do the same thing. For instance, individualism and individual gain are ideologies but provide a basis only for certain kinds or degrees of co-operative activity.

**IDEOLOGY AS AN EXPRESSION OF VALUES** – The values of co-operatives include nonexploitation and improving the economic lot of common people (see the ICA statement). Under this view, it is the values that matter most – an ideology is simply a way of conveying them. You start by asking whether members have values in common – if they do, then there is a common ideology that could likely be developed. If members are so heterogeneous that their values are incompatible, then likely you cannot have sustained, meaningful collective action. At the very extreme, it could be that the values held by different members actually conflict. Such a situation would likely reflect a catastrophic failure of member commitment. In short, if members fundamentally distrust what other members stand for, then everything falls apart, in a much more serious way than if members just have different interests from other members.

**CO-OP VALUES AS AN ALTERNATIVE VISION** – While the dominant values of society are reproduced pervasively through such things as business, media, universities, and schools, co-op values are reproduced only if a specific effort is made. Thus, one of the challenges in forming co-ops might be to develop this alternative vision. The need to create this alternative vision is one reason why the process of forming co-operatives is more difficult than the process of forming other types of organizations and why external agents are required to facilitate this development.

**IDEOLOGY AND CULTURE** – Ideology not only connects the members to each other and the co-op, but connects both of these to their milieu (e.g., rural communities) and to larger societal forces such as social movements (e.g., farm organizations).

## CO-OPERATIVE VALUES

### KEY POINTS

Co-operative members appear to be placing less value on fairness and the democratic process and more on economic factors such as price

This change is strongly correlated with age

While most people involved with co-operatives believe that co-operative values have changed, it is difficult to find appropriate measures to show that this change has indeed occurred. Nevertheless, there are a number of indications that co-operative ideology is no longer as important as it was once.

Some of the most compelling evidence for a change in the values of co-operative members is found in the work of Karin Hakelius. Hakelius (1996) finds that while older farmers view fairness and solidarity as the top ranking reasons to do business with the co-operative or to participate in the co-operative's democratic process, these are secondary to economic efficiency in the minds of younger farmers.

Other research comes to similar conclusions. Fulton and Adamowicz (1993) show that co-operative patronage at the Alberta Wheat Pool is influenced largely by economic factors such as dividend payments and the availability of agro-services. Public good aspects such as being active in farm matters and active in the community were not important in determining patronage. Once again, there was evidence that these public goods were more important to older farmers than to younger farmers.

Richards, et al. (1998) show that younger farmers in Alberta, Canada place greater weight on price and less importance on non-economic benefits such as member control or community voice relative to managers than do older members. Respondents who rely on farming for all of their income tended to be dissatisfied with the lack of focus on price and return on equity shown by co-op managers. Larger farmers also perceived the profitability of the co-op to be more important than did the managers. The presence of differing views between members and managers is also found in Burt and Wirth (1990). They find that managers put a high premium on farmer loyalty, even to the point where farmers are sometimes asked to pay a higher price.

Using an analysis of the annual report statement of the chairman of the co-operative, Hind (1997) finds that these statements become more corporate-centred and less member-centred as the co-operative ages. Interestingly, Hind could find no evidence that this shift in focus was related to calendar year time; rather, the shift was related to the time since incorporation of each individual co-op. This suggests that changing values in a co-op might be related to the age of the co-op.

### SOURCES

- Burt, L. and M.E. Wirth. 1990. Assessing the Effectiveness of Farm Supply Co-operatives: A Comparison of Farmer and Manager Viewpoints. *Journal of Agricultural Co-operation* 5: 17-26.
- Fulton, J.R. and W.L. Adamowicz. 1993. Factors That Influence the Commitment of Members to Their Co-operative Organization. *Journal of Agricultural Co-operation* 8: 39-53.
- Hakelius, K. 1996. *Co-operative Values – Farmers' Co-operatives in the Minds of the Farmers*. Dissertation No.23. Uppsala: Swedish University of Agricultural Sciences.
- Hind, A.M. 1997. The Changing Values of the Co-operative and Its Business Focus. *American Journal of Agricultural Economics* 79(4): 1077-1082.
- Richards, Timothy J., K.K. Klien and A. Walburger. 1998. Principal-Agent Relationships in Agriculture Co-operatives: An Empirical Analysis from Rural Alberta. *Journal of Co-operatives* 13: 21-34.

## **U.S. PREMIUM BEEF**

### **KEY POINTS**

Example of a focus on a single activity

Growing importance of non-geographical factors

Importance of coordination and information in providing extra value in the system

Role of contracts

Strategic alliance with a large traditional co-operative as an important element. Farmland provides access to the next stage of marketing and does not overly control the decisions of USPB.

U.S. Premium Beef (USPB) is a co-operative that “provides U.S. beef producers an opportunity to retain ownership of the beef they produce from the ranch to retail”. The co-operative began operations on 1 December 1997. By July 2000 over 1,350 producers from 33 states had marketed more than one million cattle through USPB.

A key feature of USPB is that producers are paid for the animals they sell on the basis of a value-based pricing grid. This grid provides for premiums and discounts based on how each animal that is delivered compares to pre-determined criteria. Producers selling through USPB receive individual carcass data free of charge. The value-based pricing grid and the individual carcass data have been identified as part of the reason for the increase in the quality of the cattle delivered to USPB in 1999.

USPB members come from all segments of the beef industry, including purebred and commercial cow/calf producers, backgrounders, farmer-feeders, and commercial cattle feeders. There is no geographical restrictions as to where members are from and members are free to determine where their cattle are fed – USPB cattle have been fed in over 300 yards in 11 states. A transportation credit of up to \$0.55 per cwt is provided to members (this credit represents the cost of trucking for a distance of approximately 110 miles from the plants in Dodge City and Liberal, Kansas). There are no restrictions on the breed of cattle sold to USPB, although the cattle are limited in the percentage of Brahma or dairy they can contain. Members can receive advice and consultation on genetics and herd and financial management from USPB field staff.

To assist producers in their management decisions, USPB is encouraging producers to purchase and use electronic identification tags (EID) by rebating 50 per cent of the tag cost. The EID system allows members to record animal health history (including injections and site information), allows feedlots to track daily weight gain and to project when animals will be ready to market, and allows Farmland National Beef (FNB) plants to provide individual carcass data to the feedlots and the members.

All producers who sell cattle through USPB must become members. Membership, however, does not mean the producer is a stockholder. Stockholders are those producers who have purchased delivery shares; each share purchased commits the member to deliver one head of cattle. Delivery shares can be leased or sold to other producers.

USPB and Farmland Industries jointly own FNB, the fourth largest and the only farmer-rancher owned beef processor in the U.S. FNB markets products under four branded labels – Certified Angus Beef, Farmland Black Angus Beef, Farmland Certified Premium Beef, and the Kansas Steak Company – to domestic and international customers. The Kansas Steak Company markets further processed and value-added products – primarily portion-controlled steaks – to restaurants, mail order catalogs and foodservice and retail customers. This focus on a brand name is important. FNB’s CEO, John Miller, indicated in a recent interview that the profit margins on Black Angus Beef are 20 per cent higher than on no-name beef.

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**U.S. PREMIUM BEEF** (continued)

Producers selling through USPB receive an initial payment equal to 85 per cent of the live pay weight average cash price from the previous week, less the beef check-off and a unit retain of \$12 per head. The final payment is made to the producer the week after delivery when the plant yield and the grid payments have been calculated. Producers selling through USPB also receive a patronage dividend based on the profits earned by USPB. An important source of profits for USPB is its share of profits from FNB. As an example, in the fiscal year 1998 (September to August), members received on average a grid premium of \$7.47 per head, with the top 25 per cent of USPB producers receiving a grid premium of \$26.03 per head. Patronage dividends for the 1998 fiscal year were \$10.14 per head, of which 40 per cent was distributed in cash. The remainder of the dividend was retained in the co-op in the member's name. Patronage dividends for fiscal 1999 were \$17.99 per head. The unit retain, along with interest, is currently being paid back annually.

In response to requests from producers, USPB held a northern membership and registration drive in 2000. To secure the right to purchase stock in a potential expansion offering, interested producers had to become a \$500 lifetime member and pay one dollar per head of cattle they were would be interested in delivering. The drive was successful, with 609,000 registrations from 12 states (each registration represents one head of cattle). The money raised will be used to conduct a feasibility study in the fall of 2000.

**SOURCES**

- Holz-Clause, M. 1999. U.S. Premium Beef. In *New Generation Co-operatives Case Studies*. Illinois Institute for Rural Affairs. Macomb, IL: Western Illinois University.
- Hunt, S.D. 1999. U.S. Premium Beef: A Beef Marketing Strategy for the Next Millennium. Paper presented at the U.S. Department of Agriculture's Agricultural Outlook Forum 1999. Arlington, Virginia. Retrieved 15 July 1999 from <http://www.usda.gov:80/agency/oce/waob/outlook99/99speeches.htm>.

## **NAICAM CO-OPERATIVE**

### **KEY POINTS**

Differentiation from other businesses based on offering a large number of highly integrated services in single geographical location

A focus on expanding the value of the co-operative to the membership by integrating members into the process of transformation

Original and innovative activities and strategies are being replicated elsewhere

Located in rural Saskatchewan, Naicam Co-operative has developed from a retail co-operative into a highly successful super-local providing a variety of integrated agricultural services to the surrounding communities. Beginning in 1985, under the direction of new management, Naicam Co-operative embarked on a strategy based on rebuilding the co-operative on a service by service, product by product basis.

In response to members' needs, Naicam began the rebuilding process with the agriculture department by extending its existing services into a consolidated, highly integrated agronomy service department. In a single location, Naicam provides agronomy services, crop scouting, fertilizer and chemical sales, equipment rental services, and financial services through the pilot project Agriculture Input Management (AIM). Under a joint management agreement with the neighboring Spalding and Lake Lenore co-operatives, Naicam Co-operative over took the delivery of some of the activities previously supplied by Spalding and Lake Lenore and expanded its unique services over a larger geographical area. Following the successful rebuilding of its agriculture services, Naicam upgraded both its lumber and food retail services while adding a post office and lunch counter.

By integrating members into the process of regeneration, Naicam Co-operative was able to pursue a strategy of growth and co-operative regeneration based on a common set of needs. Naicam Co-operative also differentiated itself on the basis of its highly integrated agricultural services. Naicam Co-operative became an essential part of each step of agricultural production ranging from crop scouting, the supply of fertilizer and chemicals, to the processes of seeding, spraying and harvesting. A strong emphasis on staff training and input into management and service delivery further enables the smooth operation of the co-operative's activities and the relay of information between co-operative members and management.

Naicam's innovative activities, such as crop scouting and the AIM program, have since been adopted elsewhere. Management from Naicam Co-operative has recently moved to the nearby Melfort co-operative with the objective of replicating the super-local strategy.

### **SOURCES**

Gordon Dymtruck telephone conversation, 14 August 2000.

## SASKATCHEWAN WHEAT POOL

### KEY POINTS

Diverse activities that are not closely integrated

Loss of commitment

Difficulties in implementing change

From its beginning in 1924 as a means to enable Saskatchewan farmers to sell their wheat, the Saskatchewan Wheat Pool has become Saskatchewan's largest business, Canada's largest grain handler and one of its largest co-operatives. Although the task of wheat marketing was eventually taken over by the Canadian Wheat Board, the Pool remained in operation, focusing first on grain handling and storage, and then on expansion and diversification of its operations. The Pool's growth and diversification efforts were particularly strong in the 1980s and the 1990s as it positioned itself to add value to its members' produce to meet the challenges of globalization and deregulation.

The Pool is organized around five strategic business segments: grain handling and marketing, farm supplies, livestock marketing, agri-food processing, and publishing.

To improve its grain handling and farm supply functions, the Pool's Country Elevator and Farm Service divisions merged in 1987 to become the Country Services Division. In response to moves by its competitors and the need to replace some of its elevator system, the Pool built its first concrete elevator, an 8,000 tonne facility, in 1987. In the 1990s, the Pool has undertaken a major consolidation of its elevator system, with the closing of approximately 225 elevators and the construction of 22 new, high-throughput service centres to modernize its grain handling capacity.

On the livestock side, the Pool has a majority interest in Stockman's Exchange, a livestock marketing centre in Medicine Hat, and made a major investment in Pound-Maker Agventures Ltd., an integrated feedlot and ethanol plant. It established Heartland Livestock Services in 1994 to market livestock through a network of marketing centres in Alberta, Manitoba and Saskatchewan. Heartland also operates Heartland Pork Management Services which builds and manages large intensive hog barns.

In the agri-food processing business segment, the Pool invested in various agri-food companies, including AgPro Grain Inc. (the major supplier of the Canadian milling wheat industry), Prairie Malt Ltd. (which produces malt for the brewing industry, and Northco Foods (parent company of Robin's Donuts). The Pool's business initiatives included a complementary venture CanAmera Foods (Canada's largest oil seed processing and refining business). The Pool also created CSP Foods, one of Canada's largest full-line bakery supply manufacturers and distributors.

The Pool has been in the publishing business since 1923 when it started the Progressive newspaper as part of its initial membership drive. The Progressive's name changed to *The Western Producer* in 1924 (Fairbairn, 1984). *The Western Producer* is still being published and is considered to be the foremost western farm publication in Canada. In 1989, M.C. Graphics was formed through the merger of Modern Press, the printing arm of Western Producer Publications, and Centax printers of Regina. It also formed Print West Communications, a commercial print communications company.

The Pool's efforts to go international included creation of the International Business Division to market the Pool's technology to other countries and XCAN Grain Pool Ltd., a major player in the specialty crop industry and Canada's largest exporter of these products. In June, 1999, the Pool announced a partnership with the Gomez family in Guadalajara, Mexico, to open an import grain terminal at Manzanillo. The terminal is anticipated to create marketing opportunities for Canadian commodities in a region of Mexico which is densely populated. The Pool also obtained a 53 per cent ownership interest in an ocean port terminal project at Gdansk, Poland.

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**SASKATCHEWAN WHEAT POOL (continued)**

To undertake this aggressive diversification strategy and to build a network of high throughput elevators and farm service centres, the Pool required a substantial source of capital. Faced with an aging membership, the prospect of the withdrawal of their equity on retirement, and the lack of other methods to raise capital, the Saskatchewan Wheat Pool chose to restructure its finances through the offering of a public share issue. On 2 April 1996, the Pool's Class B non-voting shares were listed on the Toronto Stock Exchange. Through this listing and a subsequent share issue, the Pool raised more than \$480 million to give it the financial flexibility it needed to address an increasingly deregulated market, help fund the modernization of its grain handling infrastructure and accelerate its expansion into value-added agri-business.

After reaching a share price approaching \$25, double the price of the initial offering, the Pool's Class B shares have fallen to the range of \$2.50. This falling share price is a reflection of a number of financial problems facing the Saskatchewan Wheat Pool. The Pool's long term debt increased from \$478.2 million in 1999 to \$545.7 in 2000 (as of 30 April 2000). Its short-term borrowings increased from \$144.1 million in 1999 to \$242.8 million in 2000.

The Pool achieved net earnings of \$48.4 million in 1996 and \$47.3 million in 1997. In 1998, net earnings declined to \$16.3 million. In the first nine months of fiscal 2000, the Pool experienced a net loss of \$44 million. This compares to a nine-month loss of \$14.2 million in the 1999 fiscal year. The third quarter results for the 2000 fiscal year show that the Pool is experiencing a declining market share in grain handling and farm supplies, major debt problems and a significant net loss in earnings.

These problems and the sharp drop in its share price have prompted a number of changes at the Pool. In June, 1999, its Chief Executive Officer resigned and the Senior Vice-President was terminated. The senior management of the Pool has changed and the middle management and field services staff have been reduced. Two nonmember, investor positions were added to the board of directors. The Pool has also divested itself of some of its diversified holdings. It has, for instance, sold its 35 per cent interest in Robin's Foods Inc. and its shares in Bioriginal Food & Science. It has also withdrawn from the Gdansk project.

**SOURCES**

Fairbairn, Garry Lawrence. 1984. *From Prairie Roots: The Remarkable Story of Saskatchewan Wheat Pool*. Saskatoon: Western Producer Prairie Books.

Saskatchewan Wheat Pool. 1999 Annual Report.

Schmidt, Mayo. 2000. Pool Announces Third Quarter Results. Regina: Saskatchewan Wheat Pool.

<http://www.swp.com>

## **PRAIRIE CENTRE CREDIT UNION**

### **KEY POINTS**

Voluntary grouping of five rural credit unions, creating a super-local while maintaining meaningful local control

Development of a new model for the delivery of credit union products and services

Prairie Centre Credit Union, headquartered in Rosetown, Saskatchewan, was established in 1993 after intense negotiations and discussions between the rural credit unions in Beechy, Eston, Outlook, Elrose and Rosetown. The community of Harris joined one year later, after it lost its financial services when the Toronto Dominion Bank closed its branch in that location. All of the credit unions involved in the formation of Prairie Centre were dealing with the effects of a decreasing and aging rural population, an increase in the size of trading areas, changing member needs, decreasing margins and increasing costs, and an agriculture sector in difficulty. Elliott (1998) states that: "Although two of the partners were in serious financial condition and one other had only begun a financial recovery, all of the players came together as equal partners to deal with short-term crises and long-term survival."

Preserving autonomy was an important issue for the five original credit unions. Through extensive discussions, it was realized that voluntary board members/leaders from another community or area would make decisions that were in the best interest of all members, no matter where they resided. In this process, autonomy came to mean that the credit union as a whole must be able to respond to local member and community needs, instead of each branch maintaining control over loans and local management.

The amalgamation allowed the consolidation of five boards of directors and the rationalization of five managers. Currently, the General Manager operates the administration office and there are four business development managers in charge of four geographic regions. Board representation is also structured around these regions, and there are local advisory committees in each of nine service locations (a number of service branches have been added since the formation of PCU). Local input on services and decisions around credit union involvement in the community and sponsorships is maintained through these committees.

Prairie Centre Credit Union has taken a leadership role in promoting social and community economic development. It has been active on the board of the area's Regional Economic Development Authority since the authority was formed and has specifically adopted a community development approach to planning for the future.

Prairie Centre Credit Union deliberately chose to avoid amalgamation with an urban credit union because of a strong commitment to delivering full financial services to rural Saskatchewan. Nevertheless, it has entered into discussions with urban credit unions at Prince Albert, the Battlefords, Estevan and Saskatoon on alternate ideas for services and their delivery. Prairie Centre is now of a size sufficient to hold its own in working with the large urban credit unions.

### **SOURCES**

Elliott, Greg. 1998. Credit Union Service Delivery Model – Business Cases, CUCS Resolution 97-05.  
Regina: Credit Union Central of Saskatchewan.

**BURGER KING****KEY POINTS**

Co-operation among non-farm individuals not bound by a common geographical location

The co-operative model as a mechanism of reducing transaction costs involved in supply chain management

In the fall of 1991, Burger King restaurant operators developed a new model for managing supply and purchasing arrangements by creating a purchasing co-operative, Restaurant Service, Inc. (RSI). RSI is responsible for negotiating all purchasing arrangements for all Burger King restaurants in the U.S. Membership in RSI is automatic. RSI is not bound by geography, but rather by a common economic interest.

RSI is responsible for purchasing core food, packaging products, kitchen equipment, uniforms, décor and discretionary services for all Burger King restaurant owners, both franchised and company. In addition, RSI represents its members' interests in discussions with Burger King Corporation with respect to product specifications, quality standards and marketing programs. As an instrument for managing supply and engaging in commodity risk management, RSI facilitates the overall effectiveness and efficiency of the supply system by reducing transaction costs. In this way, RSI is a mechanism for Burger King franchisers to directly affect the cost of inputs.

RSI members have received substantial paybacks due to reductions in costs. Between 1991 and 1997, RSI achieved nearly \$300 million in savings. During its first six years of operations, RSI has distributed over \$50 million in patronage dividends to its members. In fiscal 1997, RSI generated product cost reductions of about \$5,399 per restaurant plus a \$1,700 dividend for a return of \$7,000.

**SOURCES**

Hoffman, George. 1998. Restaurant Services, Inc. Miami, FL. Presentation to the University of Minnesota.

## **TRI VALLEY GROWERS**

### **KEY POINTS**

Failure of members to understand the risks and rewards of ownership in a co-op resulted in a failure to adequately capitalize the company

Capital acquisition problems, that may be an indicator of property rights issues, prevented the modernization of equipment and plants

Loss of focus and faulty assumptions about the market led to extensive changes in management

Tri Valley Growers is a canned fruit processing co-operative comprised of 500 grower members from the San Francisco Bay Area (Northern California). Producing half of the canned peaches, twenty per cent of the canned olives and ten per cent of the canned tomatoes sold in the U.S., along with numerous other products (e.g., pears, apricots, grapes, cherries), Tri Valley Growers is the largest multi-commodity co-operative in the U.S.

Tri Valley Growers was founded by the merger of Tri Valley Packing Association and Turlock Co-operative Growers in 1963. During this time smaller canneries were closing due to rising costs and the advent of centralized buying. Tri Valley expanded to achieve economies of scale through export sales and the development of a variety of domestic products. By 1993, Tri Valley had maintained its profitability despite a declining market for canned fruit goods and had developed a number of brand names while maintaining a focus on the private label market.

The period of 1994 to 1998 brought a new vision and rapid change to Tri Valley Growers. In 1994, Tri Valley restructured its management system and replaced nearly all of its personnel. Following these changes in management, Tri Valley began introducing radical changes. Over a period of two years, some of these changes included: an extensive market data survey; a financial restructuring plan that converted \$145 million in revolving capital to permanent equity connected to growers' delivery rights; the development of a permanent capital base through the issuing of common, preferred and equity shares; significant cuts in staff and management positions; commodity teams to monitor crops from seeds to harvest; new quality grading systems; plans to add new product lines; and a shift from commodity orientation to brand orientation. Also during this period, Tri Valley pursued joint ventures with two European companies. According to Jeff Boese, President of the California League of Food Processors, "It was an exciting-looking management style, but it was also a company that lost focus on its basic mission of putting fruit and vegetables in a can." It is worth noting that Pacific Coast Producers, another tomato/pear cooperative has done relatively well in the food service business while TVG has tried other routes.

In 1998, Tri Valley experienced losses of \$79 million. Following the resignation of the senior officers, Tri Valley adopted an interim CEO and began a process of streamlining and re-invigorating its focus on processing canned fruit. However, Tri Valley was forced to file for bankruptcy protection in July 2000 due to losses of \$200 million over the last three years. The reorganization plan from the federal bankruptcy court indicated that Tri Valley will either be sold by the end of the year or its assets will be liquidated. In response, the USDA has promised to purchase 18,000 tons of processed tomatoes.

According to court papers, larger than expected harvests that forced prices lower and high administrative costs due to personnel turnover resulted in financial failure. Tri Valley Growers' financial problems, however, can be only partially contributed to a shrinking market for canned fruit, increased competition and falling prices. Other key factors included a failure to modernize equipment, an inability to raise capital and a loss of business focus.

The failure to raise capital and modernize equipment are closely linked. Tri Valley appears to have failed to modernize its plants and equipment due to lack of capital. This lack of capital arose in part because in the past the members did not understand the risk and rewards of ownership in a co-op and did not provide sufficient capital. Not understanding the risks and benefits of ownership is a property rights issues. The conversion to permanent capital and the introduction of delivery rights was an attempt to address this issue.

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**TRI VALLEY GROWERS** (continued)

The conversion to permanent equity and the clarification of property rights could not solve the problem by themselves, however. It is also apparent that management has been slow to figure out the economic condition of the co-operative and to determine the proper strategy to deal with this. For instance, one of the strategies employed by the co-op was an attempt to differentiate the product sold by the co-op, a strategy that is difficult to implement since canned fruit is typically quite generic.

The losses created by poor management decisions created divisions between the grower members and the management resulting in pressures to turn profits quickly rather than planning for the long run. In addition, many growers lost confidence in the co-operative and management following the unexpected losses reported in 1998, thereby contributing to escalating financial distress. The poor financial performance and the dissatisfaction with management led to extensive changes in management and strategy, which in turn contributed to the financial difficulties.

**SOURCES**

- Duffey, Patrick. TVG Changes Bear Fruit: Major Restructuring Effort Brightens Future for Tri Valley Growers. Rural Co-operatives. September/October 1997.
- Modesto, Richard Estrada. Fight for Survival: Tri Valley Co-op Returns to Basics to Stem its Losses. The Sacramento Bee. 22 August 1998. Retrieved 31 July 2000 from <http://www.newslibrary.com/deliverppdoc.asp?SMH=490818>.
- Schnitt, Paul. Co-op's problems deeply rooted: Tri Valley fell hard for various reasons. The Sacramento Bee. 24 July 2000. Retrieved 31 July 2000 from <http://www.sacbee.com/news/tools/printify.cgi>.
- Williams, Norman D. Major Changes made at Tri Valley Growers, Estimated \$79 million Loss Forces Moves. The Sacramento Bee. 22 August 1998. Retrieved 31 July 2000 from <http://www.newslibrary.com/deliverppdoc.asp?SMH=161018>.

## DAIRY FARMERS GROUP

### KEY POINTS

Market deregulation, increased competition and concentration in the dairy industry led to mergers, acquisitions and restructuring

Poorly defined property rights and expansion exacerbated capital acquisition issues leading to a proposed restructuring towards a PLC

Failure to define property rights, through delivery rights or a separate class of shares for those supplying higher value milk, is creating pressures to secure a large share of the premium market

Extensive change hampers the movement towards successful adaptation

Dairy Farmers Group (DFG), a large Australian dairy processing co-operative, is an example of both consolidation in the dairy industry and capital acquisition issues arising from expansion and poorly defined property rights. DFG also exemplifies the problems that arise from structural change in an organization.

Amidst the tumult of a rapidly changing dairy industry, characterized by often hostile takeover bids and consolidation, DFG's total assets have risen from \$167M in 1989/90 to \$587M in 1997/98. To finance the acquisitions that created the larger asset base, DFG developed a number of internal capital sources. These have included: compulsory levy to purchase shares in the co-operative linked to the volume of milk delivered to the co-operative; a voluntary dividend share reinvestment; CCUs to members; bonus share issues to reflect asset growth, increased debt levels and short term borrowings from members. These internal strategies, however, have proved inadequate and DFG continues to lack the capital necessary for rationalizing operations following the acquisitions. DFG is also concerned that member retirement and an increasing proportion of allocated capital will result in escalating payouts. In addition, DFG faced a takeover bid from the international dairy giant, Parmalat, in August of 1999. Since then, DFG engaged in failed merger negotiations with the co-operative Bonlac, while Parmalat solicited National Foods.

In light of these pressures to raise external capital, DFG has proposed restructuring towards a publicly listed company (PLC) by separating DFG into a supply co-operative and a trading PLC. External investors would hold 25 percent of the PLC while the controlling interest will be maintained by the farmer-owned supply co-operative. A ten-year exclusive milk contract between the supply co-operative and the PLC is a key feature of the proposed model. This contract will provide a guaranteed outlet for the milk and the financial security necessary for farmers to invest in production increases. The restructured model is designed to send the correct market signals to farmers concerning production decisions and reconcile property rights issues.

However, the conversion to a PLC may create pressures to capture a significant degree of the premium market, since DFG has not proposed to adopt either delivery rights or the creation of a separate class of shares for those supplying higher value milk. Augmenting the pressures to garner a secure market presence is a highly concentrated supermarket industry. Due to these pressures, DFG has recently undercut prices in order to win a national tender to supply fresh milk to the Woolworth supermarket chain. Amidst the chain reaction of falling prices, dairy processors, including DFG, are experiencing declining profitability. Combined with deregulation, these tactics have led to a 20 percent decline in the price of house brand milk sold in supermarkets and a 10 percent decline in branded milk. Falling prices promise to curtail DFG's short-term growth and postpone its conversion to a PLC. However, this aggressive strategy has resulted in merger talks between National Foods and DFG.

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**DAIRY FARMERS GROUP** (continued)

Efforts to grapple with a changing industry and to avoid takeover have resulted in a spiral of rapid expansion, capital acquisition issues, and restructuring. Problems set forth by rapid expansion, such as property rights issues and insufficient capital, have necessitated restructuring, which in turn create another set of pressures such as the need to look at alternative organizational structures and to pursue premium markets.

**SOURCES**

Evans, Simon. Milk rivals forced to consider merger. *The Australian Financial Review*. Retrieved 5 September 2000 from <http://www.aft.com.au>.

Frith, Byran. Ill-considered Strategy a Detriment to Dairy Industry. *The Australian*. 18 August 2000. Retrieved 25 August 2000 from <http://www.news.com.au>.

Mitchell, Sue. Milk Floats Delayed as Earnings Suffer. *The Australian Financial Review*. 24 August 2000. Retrieved 25 August 2000 from <http://www.afr.com.au>.

Plunkett, Brad. Scope for Expanding the Economic Contribution of Agriculture Trading Co-operatives in WA. Economics and Policy Group, Department of Agriculture, Western Australia, 2000.

**AMERICAN CRYSTAL SUGAR****KEY POINTS**

As the first New Generation Co-operative (NGC), American Crystal Sugar's unique strategy has served as a model for NGC formation and development

Evidence of efficiency gains related to NGC characteristics such as the Quality Payment System

Entering a later phase in maturity, American Crystal Sugar is now facing issues surrounding the transfer of member equity

Owned by approximately 2,900 grower shareholders in the Red River Valley of North Dakota and Minnesota, American Crystal Sugar is the largest sugar beet processor in the U.S. American Crystal Sugar was formed in 1973 when the existing investor-owned firm exited the industry. Faced with unique problems surrounding value-added processing, such as relationship risk and capital acquisition, American Crystal Sugar pioneered the New Generation Co-operative (NGC) model. This original NGC model included principles such as restricted membership and tradable equity shares that link producer capital contributions with tradable delivery rights. These NGC features enabled American Crystal Sugar to invest in improved plant equipment and increase plant capacity. Within four years American Crystal Sugar nearly doubled its beet acreage.

In 1979, American Crystal Sugar introduced the Quality Payment System which links payment to shareholders with the quantity of recoverable sugar produced. The Quality Payment System dramatically changed growing practices and resulted in improved plant efficiency and increased grower income. The NGC structure also enabled the introduction of techniques that reduced spoilage losses such as splitting piles, forced ventilation and huge deep-freeze storage sheds to keep beets frozen well into the spring, preserving millions of dollars worth of sugar. Tradable delivery rights, restricted membership and quality payment systems are now the basis of the New Generation Co-operative model.

American Sugar Crystal has grown through partnerships with other co-operatives and corporations in the sugar industry. A partnership between American Crystal Sugar and two other co-operative organizations, Minn-Dak Farmers Co-operative and Southern Minnesota Beet Sugar Co-operative, led to the formation of United Sugars Corporation. United Sugars Corporation is the largest marketer of beet sugar in the U.S. In addition, American Crystal Sugar is a member of Midwest Agri-Commodities marketing co-operative and has developed a joint venture with the corn sweetener company ProGold. In 1998, American Crystal Sugar expanded beet-slice operations and constructed a molasses desugarization facility. American Crystal Sugar also expanded sugar beet acreage in 1999 through an increase of 61,500 shares of preferred stock.

Having been in business for over 25 years, American Crystal Sugar now faces structural issues related to generational change. As the founding members retire and a second generation of farmers is sought, American Crystal Sugar must transfer the equity of its retiring membership to new members. Since the value of tradable delivery rights is determined by the market, the current price reflects the expected future value of the share. Therefore, the benefits the new members gain is limited to a competitive price for their product plus any growth in the value of shares beyond the expected future value. The high cost of delivery rights in relation to returns may inhibit the entrance of new members. Likewise, the transfer of member equity may result in 'neo-horizon' problems. Since new members do not expect to see returns on their shares, they will tend to support activities that maximize short-term returns on the price they receive for their product rather than long-term returns.

**SOURCES**

[www.crystalsugar.com](http://www.crystalsugar.com).

## **FEDERATED CO-OPERATIVES LIMITED (FCL)**

### **KEY POINTS**

Withdrawal from secondary manufacturing activities

Tight focus of co-operative on core lines of business

No mergers, joint ventures or alliances

Federated Co-operatives Limited (FCL) provides central wholesaling, manufacturing and administrative services to approximately 300 locally-owned retail co-operatives in Western Canada. The latter are owned by nearly 900,000 individual co-operative members. FCL delivers a wide variety of goods and services throughout its territory, with a particular concentration in small rural communities. Merchandise provided by the retails includes groceries, general merchandise, petroleum products, and feed and crop supplies. Divisions within FCL are representative of the types of retail co-ops it serves, including retail operations, consumer products, agricultural products, distribution, forest products, refining and environmental and technical services.

The recession of the early 1980s hit FCL hard. After rapid expansion in the 1970s, all of the industries in which FCL was involved were affected, notably agriculture, petroleum, and lumber. Demand and prices fell sharply. The most difficult year was 1982. Local savings by the retail stores were "heavily negative"; 116 were in a net loss position even after they received FCL's patronage refund. FCL's returns to the retails fell sharply.

FCL took drastic action to address these problems, both in the administration of the co-operative retail system and in the operations of the retails themselves. The Vancouver region office was closed and British Columbia retails were served out of Edmonton and Calgary. The Retail Development Division was closed and staff was cut by over 20 per cent. Two production facilities, a sawmill and manufactured homes, were taken out of production to save costs. The Co-operative Consumer, FCL's co-operative newspaper, was discontinued.

A review of the operations of the retails found that 36 were in serious financial difficulty. FCL advised these to close nonviable departments, cut staff and salaries, increase working hours, and cut expenses and inventories. Emphasis was placed on maximizing productivity, minimizing costs, and working closely together for marketing efficiency. A major change in thrust that occurred at the senior management level of FCL enhanced marketing, merchandising and advertising.

FCL's recovery was enabled by specific strategies. The most important has been the practice of Efficient Consumer Response or ECR. This strategy focuses on the removal of costs from the supply chain, each step of which is reviewed and analyzed to determine the most efficient and least expensive way of getting products to consumers. An example of this was FCL's Corporate Bulk Plant Program, which replaced 167 individually owned and operated retail bulk plants to meet growing consumer demands and new environmental standards with a corporate program. From 1987 to 1999, FCL built 42 new corporate bulk plants which enable retails to deliver fuel using their own trucks while keeping inventories down and avoiding costly upgrades to their own facilities. The corporate program has been a key factor in the growth of volume and market share of petroleum which has been achieved in the 1990s.

A recent example of ECR is the new cross-docking initiative. Instead of suppliers delivering their products directly to the retails and independents served by FCL, a number – mainly in the meat business – are cross-docking their products at FCL's food distribution centres. Dairy products are also now included. FCL then takes the product and delivers it without taking it into its own inventory.

Continued on next page

**FEDERATED CO-OPERATIVES LIMITED** (continued)

Inventory management is now done with automated systems, as is warehouse management. FCL's focused marketing program – which includes advertising, promotions and routinely updating the look of the retail co-ops – has had the retailers complete over 100 food floor modernization, replacement and construction projects from 1997 to 1999. Ongoing training and development opportunities for staff and elected officials have enhanced implementation of these strategies; FCL's approach in this regard is to help staff and officials "embrace the new".

Finally, FCL has been moving toward achieving corporate ownership of some assets. To that end, it purchased The Grocery People in 1992. The Grocery People provided stores that the Co-operative Retail System could supply. In turn, The Grocery People enable FCL to get into the produce market.

FCL is headquartered in Saskatchewan and continually ranks as the province's largest or second largest enterprise. It continually shows strong performance with record surpluses while employing a relatively conservative strategy to meet its competition in the retail and wholesale grocery, hardware, bulk fuel, and general merchandise businesses. It remains tightly focused on its core lines of business and has withdrawn from secondary manufacturing enterprises which diverted resources from its core products and services. FCL has been successful, in contrast with other co-operatives which have been diversifying, merging, entering into joint ventures, and employing other strategies to adjust.

**SOURCES**

Banda, Dennis. Presentation to the Institute of Co-op Studie". Montebello, Quebec. October, 1999.

Fairbairn, Brett. 1989. *Building a Dream: The Co-operative Retailing System in Western Canada, 1928-1988*. Saskatoon: Western Producer Prairie Books.

Federated Co-operatives Limited. 1999 *Annual Report*.

Hammond Ketilson, Lou, et al. 1998. *The Social and Economic Importance of the Co-operative Sector in Saskatchewan*. Saskatoon: Centre for the Study of Co-operatives.

<http://www.fcl.ca>

**AGRICORE****KEY POINTS**

A merger of two smaller, regional co-operatives which has resulted in the formation of Canada's largest marketer of crop protection and plant nutrition products and its second largest grain handler

Agricore was formed in 1998 through the merger of the Alberta and Manitoba Wheat Pools. It now serves nearly 80,000 members in Canada's four western provinces.

The merger that formed Agricore was prompted by a number of trends in the grain handling industry. Fulton (1997) describes these trends as arising primarily from the removal of the Western Grain Transportation Act (WGTA), concern over the future of the Canadian Wheat Board (CWB), and the growth of agri-food processing. With the loss of the WGTA, it is expected that a market-based grain transportation system will be established. The grain handling companies which can obtain grain from a number of sources or locations and achieve efficiencies in transportation logistics will do better than those which cannot.

Although the CWB continues to provide single-desk selling, it is expected that it may lose its authority within the next 10 years. This is prompting grain handling companies to position themselves in anticipation of this possibility. To do so they are building terminals and other plants across the Prairies. Larger organizations are needed to access international markets for non-CWB crops like canola, lentils and peas. The growth of processing activities on the Prairies is also prompting grain handling companies to establish themselves in this area to be able to source obtain grain directly from farmers.

The Alberta Wheat Pool and Manitoba Pool Elevators made a bid to purchase all outstanding shares of United Grain Growers (UGG) in 1997. The bid did not succeed. It was vigorously opposed by UGG's board, which threatened to implement a "poison pill" to thwart the pools' efforts.

Prior to their merger, Manitoba Pool Elevators and the Alberta Wheat Pool also had discussions regarding joint ventures or strategic alliances with several large United States co-operatives, including Cenex Harvest States and Land O'Lakes. The U.S. firms were said to prefer doing business with one prairie-wide agricultural co-operative. Although Gordon Cummings, Agricore's CEO, stated in 1998 (Ewins, 1998) that no recent discussions had been held, "It makes sense for Canadian grain companies like Agricore to look for partnerships and strategic alliances outside Canada...given the uncertainty about the fate of the Canadian Wheat Board and the single-desk wheat marketing system." He further stated that, "It's obvious that if we could align with someone like Cenex Harvest States in terms of grain marketing and do it together, set up a joint venture or find some way to market theirs and ours together, then we'd be in a better position than trying to do our own alone."

Since the merger, Agricore has been acquiring processing facilities for pulse crops and seeds. Agricore has also embarked on an aggressive capital spending program to expand its grain handling and farm supply businesses.

In its first full year of operations since the merger (1998-99), Agricore achieved net earnings of only \$12 million, which was less than the combined previous year's earnings of Alberta Wheat Pool and Manitoba Elevator Systems. It also handled less grain, but claims to have maintained a 26 per cent share of total grains handled in Western Canada, the same as it had the year before.

**SOURCES**

Agricore Co-operative Ltd. 1999 Annual Report

Ewins, Adrian. 1998. Agricore considers U.S. alliance. *Western Producer* (3 December).

Fulton, Murray. 1997. Transformation of the Grains Industry in Western Canada. Saskatoon: Centre for the Study of Co-operatives, University of Saskatchewan.

Nostalgia, optimism mark Agricore launch. InterSector. Ottawa: Canadian Co-operative Association. Winter 1999.

Rance, Laura. 1998. Agricore Doesn't Want to be Big, Just Big Enough. *The Manitoba Co-operator* (8 December)

## **MD FOODS**

### **KEY POINTS**

Mergers and international expansion enables competitiveness through economies of scale in R&D, market power to consolidate relationships with a concentrated retail industry, cost efficiencies and the minimization of the threat of foreign takeover

Private and branded labels and product innovation as a differentiating strategy

The multiple string model is utilized to distinguish between members supplying differentiated raw materials

The dairy co-operative MD Foods (Mejeriselskabet Denmark) is an example of a truly international agriculture co-operative. Since its merger with Klover Maelk and Arla co-operatives in 1999, MD Foods has transformed itself from a Denmark-based dairy co-operative with the agenda of pooling Denmark's milk, into a multinational dairy co-operative producing and supplying private label and branded dairy products throughout the world. In addition, with the objective of handling the production of differentiated raw material for members – e.g., organic and non-organic milk – MD Foods has adopted a multiple strings model.

The Danish dairy co-operatives, MD Foods and Klover Maelk, were born out of a wave of consolidation during the 1960s. Due to saturation in the domestic market by the late 1980s, MD Foods embarked on a round of international expansion by creating MD Foods International A/S (MDI). MDI operated as a holding company for subsidiaries in the U.K., Germany, Scandinavia, Saudi Arabia, South Korea, and 13 other countries. In April of 1998, MDI was replaced by MD Foods International Group (MDIG) a wholly-owned subsidiary of MD Foods Amba.

To operate in competitive international retail markets, such as the United Kingdom, MD Foods distinguished itself by manufacturing private-label fresh milk and both private and branded-label fresh dairy products including cheese, yogurt and butter. In addition, to ensure a preferred relationship with retailers, MD Foods helped retailers differentiate themselves by adding value to their product line. This strategy has included adding extra fruit for one retailer's own-label yogurt or producing a low-fat yogurt for another. Category management has also helped the differentiation strategy of MD Foods retail customers. Likewise, MD Foods maintains a market niche through product innovation. For example, in the fall of 1998 the company launched Cravendale PureFiltre, a fresh milk that goes through a filtering process prior to pasteurization which gives it a longer shelf life than conventionally pasteurized milk.

The strategy of retail product differentiation sometimes requires the differentiation of the raw materials, as is the case for organic versus conventional milk. A premium is added to organic milk at the farm level to encourage members to continue to deliver to the co-op. This premium was originally based on cost of production factors, but was changed to market based factors when some organic producers found it more advantageous to sell their organic milk outside the co-op (indeed, a number of members even formed their own co-ops to process the organic milk). MD Foods has also adopted consultation committees of organic milk producers to reflect the heterogeneity of its members. Although there is no distinction between conventional and organic producers within the governance system, these consultation committees and the segregated price provide the differentiating function of the multiple strings co-operative model.

Continued on next page

**MD FOODS** (continued)

In 1992, MD Foods and Klover Maelk agreed to share a common raw milk distribution system and production facilities to realize cost efficiency gains of larger economies of scale. However, as the dairy industry becomes more and more international, large expenditures on R&D that increase economies of scale and scope, the need for a significant market presence to consolidate relationships with a powerful retail industry and the threat of foreign takeover create greater pressure for mergers and growth in international market presence. By March of 1999, these pressures cumulated in a much debated and turbulent merger between MD Foods and Klover Maelk. Together these two co-operatives control 88 per cent of the Danish raw milk supply, while the remaining is fragmented among small local dairies. Further pressure for international expansion has pushed MD Foods to consolidate its relationship with the Swedish dairy co-operative, Arla, through a second merger.

**SOURCES**

Agrell, Per J. and Kostas Karantininis. Co-operatives' Merger Strategies: The MD Foods – Klover Maelk Case. The Royal Agricultural University of Copenhagen

Federation of Danish Co-operatives. 1999. Multiple String Co-operatives: Organisation and Control of Differentiated Agricultural Production. The Federation of Danish Co-operatives. Translated by Gitte Shine.

Harvard Business School. MD Foods Amba. President and Fellows of Harvard College, 1998.

## FARM MACHINERY CO-OPERATIVES – CUMAS

### KEY POINTS

Response to narrowing profit margins of commodity production and growing economies of scale

The umbrella or multiple fingers model allows the flexibility necessary to meet diverse member equipment requirements

A contractual relationship between the members and the co-operative minimizes free-rider behaviour

The CUMA – Cooperative d' Utilisation de Matériel Agricole – loosely translated as “co-operative for the use of farm implements” – is a new model of farm machinery co-operative spreading throughout Quebec and Ontario. The first CUMA, formed in Saint-Fabien, Quebec in 1991, was modelled after CUMAs in France. Camille Morneau, a representative from the Quebec Ministry of Agriculture, Fisheries and Food, studied the model in France before he decided to try to apply the model to Quebec. Since then, more than a thousand farm operations have become members of the more than forty-seven CUMAs established in the region. The majority of CUMAs have been formed by dairy farmers interested in sharing forage equipment such as harvesters, seeders, and hay balers.

The combination of falling returns to commodity production, increasing machinery costs and the need for continued technological innovation motivated the formation of CUMAs. The CUMA, which owns the equipment and rents it out to its members at the lowest possible cost, enables equipment cost savings and economies of scale. Shared machinery allows for the purchase of new equipment, which is larger and more efficient than what an individual would otherwise be able to purchase. Through larger economies of scale, on-farm efficiency is improved considerably. In addition, membership in a CUMA enables a decrease in equipment costs. Some estimate that the equipment and machinery cost are lower by as much as 70 per cent. Improved efficiency and cost savings are significant incentives for producers to pool resources and ensure that the CUMA runs smoothly. In addition, members of a CUMA are able to access a greater pool of knowledge and resources of their fellow peers.

The CUMA is divided into multiple fingers or activity branches that correspond to the use of one machine, piece of equipment or service. To obtain the right to use the equipment and machinery, members must join an activity branch. To join an activity branch, each member must purchase investment shares which provide the CUMA with equity capital needed to purchase the machine. Typically used to finance 20 to 30 percent of the purchase cost of equipment, member investment shares do not receive interest. The remaining capital costs are covered through loans with financial institutions. In addition, members pay fees to cover the annual rent of the equipment including the real cost of financing (capital and interest) the equipment and the repair, insurance, storage and maintenance costs.

Members may choose to join any combination or number of activity branches. Through these “multiple finger” activity branches, diverse member equipment needs are met, a significant degree of producer independence in production decisions is maintained and the best possible relationship between each individual member and the co-operative is ensured.

Upon joining an activity branch, members must sign a subscription contract which commits them to using the particular piece of equipment for a specific amount of time, or number of units, per year for the entire period of financing. To avoid conflict in scheduling, the subscription contracts specify the order in which members will use the machines if scheduling conflicts arise. Scheduling conflicts have been minimal in Quebec CUMAs since hay production is relatively less time sensitive than other types of production and the use of large equipment enables operations to be completed faster. The use of a subscription contract that outlines the commitments of the members to the co-operative ensures that free-rider behavior is avoided and that the benefits of the co-operative are fairly distributed.

Continued on next page

**CUMAS (continued)**

Each activity branch is organized by a branch manager and an equipment manager. The branch manager is responsible for organizing the use of the equipment or machine, administering schedules and ensuring that the subscription contracts are adhered to. The equipment manager is in charge of organizing the upkeep, delivery and repair of the equipment. Both branch and equipment managers report to the board of directors which is elected by the general assembly or membership. In this way, independent activity branches are integrated into an overall co-operative structure.

Due to the success of the CUMA model in the dairy industry, it is now being creatively modified to address other problems such as the shortage of skilled farm labour. In addition, producers involved in the hog, poultry, beef, and vegetable sectors are also beginning to form CUMAs.

**SOURCES**

Harris, Andrea and Murray Fulton. 2000. *The CUMA Farm Machinery Co-operatives*. Centre for the Study of Co-operatives. Saskatoon, Saskatchewan.

Harris, Andrea and Murray Fulton. 2000. *Farm Machinery Co-operatives in Saskatchewan and Quebec*. Centre for the Study of Co-operatives. Saskatoon, Saskatchewan.

**UNITED COUNTRY BRANDS****KEY POINTS**

New model characteristics – multiple string co-operatives

Finding coherence in a large organization

Mergers and acquisitions

United Country Brands is the name given to the proposed merger between Cenex Harvest States and Farmland Industries. In 1998, Cenex merged with Harvest States to create one of the United States' largest farmer-owned co-operatives. Cenex Harvest States is now a fully integrated agricultural co-operative. The co-operative's 6,000 employees serve member co-operatives and producers in 18 states, with territory ranging from the Great Lakes to the Pacific Northwest and from the Canadian border to Texas. Its core products and services include grain marketing and food processing. Cenex Harvest States also operates petroleum refineries and pipelines and it markets and distributes energy products, agronomic inputs and feed.

Cenex Harvest States began discussing amalgamation with Farmland Industries in mid-1999. Farmland Industries is a farmer-owned co-operative with sales in all 50 states and more than 60 countries. Farmland is a highly diversified company with major business lines in crop production and crop protection products, livestock feeds, petroleum, grain processing and marketing, and the processing and marketing of pork, beef and catfish products. It has 600,000 farmer-owners in the United States, Canada and Mexico. Farmland is an international marketer, processor and distributor of agricultural, food, financial and industrial products and services, and has 82,000 employees in 59 countries.

The Boards of Directors of each co-operative voted in the fall of 1999 to combine operations, effective March 1, 2000. The new organization was to be called United Country Brands and was anticipated to have projected sales of nearly \$20 billion. Both organizations have complimentary businesses and overlapping memberships. The consolidation would have increased opportunities to add value to the grain and livestock raised by producers. There were opportunities to achieve substantial operational savings and to open windows to expanding markets.

A new form of co-operative would have resulted from the amalgamation of Cenex Harvest States and Farmland Industries. The structure of the new organization would have made United Country Brands an umbrella co-operative with well-defined, single purpose "fingers" or individual co-operatives under that umbrella. Members would have been able to choose which components or "fingers" to invest in and do business with. Eleven to fifteen strategic business units were planned. Members would have had the opportunity to convert the individual fingers into new generation co-operatives. Through better-designed incentives, United Country Brands would have been able to go to its members for risk and growth capital, instead of using outside capital.

In spite of the apparent advantages, Cenex Harvest States' members appear to have had reservations about joining with Farmland. A Cenex membership vote on the proposed merger fell just short of the two-thirds needed to formalize the amalgamation. Farmland's members voted 89 per cent in favour of the merger.

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**UNITED COUNTRY BRANDS (continued)**

Farmland's proposed merger with Cenex Harvest States has thus been delayed. A news release issued by Cenex Harvest States on April 6, 2000 cited the severe downturn in agriculture as the reason. Noel Estenson and H.D. "Harry" Cleberg, respective CEOs of Cenex Harvest States and Farmland Industries stated that: "For that reason, we believe it is in the best interests of the member-owners of both co-ops to devote our efforts to maintaining stability in our joint ventures and in our individual business operations." The two co-ops currently have joint ventures in energy marketing, supply and distribution; petroleum refining and pet food manufacturing. They recently formed Agriliance, LLC, a joint venture in agronomic supply and marketing, with Land O' Lakes, Inc.

**SOURCES**

Cenex Harvest States. 1999 Annual Report

Farmland Industries. 1999 Annual Report

Personal communication with Dr. Michael Cook, R.D. Partridge Professor, University of Missouri on 22 July 2000.

[www.cenexharveststates.com](http://www.cenexharveststates.com)

[www.farmland.com](http://www.farmland.com)

[www.ndfu.org/\\_vti-bin/shtml.dIII/11-17-1999-4.htm](http://www.ndfu.org/_vti-bin/shtml.dIII/11-17-1999-4.htm)

**UNITED SUGARS CORPORATION****KEY POINTS**

Non-geographically defined corporation comprised of co-operative and non-co-operative enterprise

Highly focused on an integrated single activity

Utilization of information technologies to reduce transaction costs, increase efficiency and monitoring capabilities

United Sugars Corporation, the largest beet sugar marketer in the United States, is an example of a highly integrated and focused marketing corporation. An alliance between three New Generation Co-operatives, American Crystal Sugar, Minn-Dak Farmers Co-operative and Southern Minnesota Beet Sugar Co-operative, resulted in the formation of United Sugars in 1993. Since then United Sugars has expanded into sugar cane and corn sweetener markets through joint ventures and mergers with two non-co-operative enterprises, ProGold and U.S. Sugar Corporation of Florida. These unions increased United Sugars' share of the U.S. sugar market to 25 percent. By opening a sugar cane processing plant in Florida in collaboration with U.S. Sugar Corporation, United Sugars moved away from a geographically defined entity towards an entity defined by a mutual economic interest in sugar packaging and distribution.

By maintaining a highly integrated operation from sugar beet and cane production to processing, packaging and distribution, United Sugars maintains a leading role in the sugar industry. New information technologies, such as an integrated computer software system that links the manufacturing, sales and distribution between United Sugars and American Crystal Sugar aids in the integration of operations. This program will enable United Sugars to analyze profitability by customer and product segments, select the most cost efficient transportation carriers, and automate shipment scheduling. In this way, information technology enhances monitoring, reduces transaction costs and errors while increasing efficiency and profitability.

**SOURCES**

Bailey, Ann. Beet Business is Sweet. *Grand Forks Herald*, 8 December 1995, Agriculture Section.

Johnson, Rona K. Minnesota Co-operatives join to form fourth-largest US sugar supplier. *Journal of Commerce and Commercial*, 398 (1993): 11A.

United Sugars Opens Refining Plant. *Candy Industry* 1 Oct 1998, p. 62.

United Sugars to Market Corn Sweeteners, *Prepared Foods* 164 (1995): 94.

**ROOSTER.COM****KEY POINTS**

Service based on a common economic interest rather than a common geographical location

Information technology and e-business promotes closer relationships between farmers, suppliers and marketers

Combines the economies of scale associated with national level operations and the responsiveness of local dealers

On the first of May 2000, a new and highly innovative e-business, Rooster.com, was launched by Cenex Harvest States Co-operative, Cargill Inc., and DuPont. These three agriculture giants plan to revolutionize the way farmers buy supplies, finance production and market their products. As a comprehensive web-based marketplace that will include farm retailers, co-operatives and manufacturers, Rooster.com has been likened to a two-way virtual agriculture shopping mall. Like any shopping mall, farmers will be able to compare prices and purchase a wide variety of goods and services at a one-stop location. According to Joe Stone, a former Cargill wheat trader, Rooster.com will be “an industry portal where the farmer can go for essentially everything that he or she needs – from buying seeds, chemicals and financing to marketing their production.” Rooster.com is comprehensive, open to all farmers, offers inputs as well as grain-marketing services, handles transactions, and provides agribusiness news, weather reports, and discussion forums.

Following the shopping mall analogy, Rooster.com does not own the products that are bought and sold, but rather acts as a venue. Each business operates independently ensuring competition. Likewise, this strategy enables each business to maintain its individual ownership structure whether it be a co-operative or an investor-owned firm.

Rooster.com offers farmers the opportunity to use their local dealers and co-operatives for the delivery of goods. By combining the responsiveness of local retailers and the economies of scale of the Internet, Rooster.com hopes to be efficient while maintaining the benefit of working with local businesses.

As the number of farmers using the Internet multiplies, e-businesses, like Rooster.com, may profitably expand in an agriculture industry characterized by slow growth and low margins. Analysts estimate that Rooster.com has the potential to capture 1 per cent of the U.S. domestic food market with a value of approximately \$7 billion. Rooster.com may become the central marketplace for the U.S. farming industry.

**SOURCES**

Bonisteel, Steven. Business-To-Barnyard Venture, Rooster.com. BizReport. Retrieved 31 July 2000 from <http://www.bizreport.com/news/2000/03/200003-10/htm>.

Deckmyn, Dominique. B-to-B Bumper Crop. The Global Food Exchange. Retrieved 31 July 2000 from <http://globalfoodexchange.com/gfeMar6.html>.

[www.rooster.com](http://www.rooster.com)

**RABOBANK****KEY POINTS**

Growing importance of non-geographical factors

International expansion

Rabobank, headquartered in the Netherlands, was formed in 1972 through the merger of two co-operative bank central organizations, the Co-operative Central Raiffeisen Bank of Utrecht and the Co-operative Central Farmers' Credit Bank of Eindhoven. Its initial emphasis was on agricultural financing.

The merger of the two centrals enabled the new entity to rationalize the organizational structure, the individual member credit bank locations and the service policy of the two organizations. In doing so, the focus has shifted from individual farmer clients of individual member banks to companies interested in operating internationally. Rabobank has diversified and specialized its operations to meet changing customer demands and competition from the banks, and to take advantage of opportunities presenting themselves through globalization. In a commercial environment which has erased borders and decreased regulation, it has recognized that customers' expectations have changed and they are not confining their use of banks to the ones in their own country.

In 1973, the organization restructured in the area of the securities business to serve its member banks and the increasingly sophisticated financing needs of their customers. It then added special financing services for small and medium sized businesses. In 1975 it got into the mortgage business for both residential and commercial properties, and in 1978 entered the insurance business and increased its activity in the consumer lending market. In 1981, it established a wholly-owned subsidiary to supply services including debtor claim management, debtor portfolio management and financing, along with a wholly-owned leasing subsidiary.

As a response to economic renewal in the Netherlands, it placed more emphasis on supplying venture capital to small and medium sized businesses and established its own Venture Capital Fund in 1982 to supply capital to internationally-owned companies in the field of advanced technology applications. In 1985 it acquired the equity of the Netherlands Shipping Mortgage Bank and still maintains this operation. In 1986, it created a separate Biotechnology Venture Capital Fund, and in 1988 it established a Merchant Banking Division to distinguish between personal and institutional investing and better serve the latter.

Rabobank created Rabo International Advisory Services as a fully-owned subsidiary of Rabobank International in 1989 to provide its experience and technology of finance, (rural) banking, co-operative development and agri-business to the international arena, especially to emerging markets in Central and Eastern Europe, Asia, Latin America and Africa.

Rabobank now specializes in the food and agribusiness sector and in the health care sector. The health care sector is one of the fastest and largest growing sectors in the world. Rabobank International, its global wholesale bank, concentrates on providing specialist knowledge of financial solutions in the food and agriculture and health care sectors to its customers. It applies its expertise to the whole sectoral chain from raw material to finished product. Rabobank has established an international network of offices to support Dutch companies doing business abroad and has 90 offices in 30 countries.

Rabobank has a number of divisions or services aimed at serving the food and agribusiness sector. For instance, the Agri Project Finance Team tailors financial solutions to customers' needs. Its services include: feasibility studies and financial engineering services for "greenfield" projects; investment and/or expansion programs and corporate restructuring; financing of food and agri-business projects which Rabobank considers financially and economically feasible; and arranging of syndicated project financing facilities and related financial products.

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**RABOBANK** (continued)

Rabobank International announced a new strategy for success on 23 September 1999. This strategy is designed to concentrate even more specifically on its core customers, its specialist skills and delivery mechanisms. Rabobank International aims to offer added value on the basis of its core competencies, which it regards as its “top quality staff”, “commitment to and a thorough knowledge of food and agriculture markets world-wide, distribution capacity within the Netherlands, and a wide specialist knowledge of structured finance products”. Its goal is to become a market leader in global food and agri-business within the next three years, which entails doubling its present market share to 4 per cent.

**SOURCES**

Bol, Herman H.J. and Albert M. Dierick (1990). *The Co-operative Banking System in the Netherlands*. Amsterdam: Netherlands Instituut voor het Bank - en Effectenbedrijf.

Ravoet, G. (1994). The challenge facing European co-operative banks. *The World of Co-operative Enterprise*. Plunkett Foundation.

[www.rabobank.com](http://www.rabobank.com)

**SPRING WHEAT BAKERS****KEY POINTS**

Thoroughly investigated all the options for value-added spring wheat processing before engaging in a business development strategy

Large geographic distribution of its members allows Spring Wheat Bakers to access the highest quality wheat

Instead of locating inside its member region, the manufacturing plant is strategically placed near the largest consumer market

Formed in March of 1996, Spring Wheat Bakers (SWB) is a new generation co-operative of approximately 2,700 spring wheat producers from across North Dakota, South Dakota, Minnesota and Montana. SWB, formerly United Spring Wheat Processors, manufactures frozen dough and frozen partially-baked products at its plant in McDonough, Georgia.

SWB pursued a business development strategy different from previous value-added co-operatives. Because of the diverse value-added opportunities for spring wheat, SWB choose to explore all the possibilities for value-added production. By garnering a reputable steering committee of leaders in value-added processing, including Mike Warner from the board of directors of American Crystal Sugar and wheat growers associations in the region, SWB was composed of experienced and knowledgeable leaders from the beginning. On the basis of this credibility and an increasing dissatisfaction with falling commodity prices, SWB assembled a supportive membership ready to invest in the exploration of the options for value-added spring wheat production. During a membership drive, producers were asked to invest \$5,000 each to establish membership with the co-operative. An initial installment of \$200 in seed money was used to conduct industry analyses and locate a CEO. The remaining \$4,800 was placed in an escrow account; the interest on this money funded the business planning stage and hired executive management.

Following a year of research, SWB unveiled a business plan to enter the frozen dough and partially-baked bread industry. Market analysis revealed a growing market for frozen dough and partially-baked products as a result of increasing consumer demand for a greater variety of bread choices and the lack of skilled bakers. In addition, many of the bakeries experiencing the strongest growth are dependent on spring wheat to meet quality specifications. SWB also saw the frozen dough and partially-baked product industry as alluring because it is not dominated by any one large player or groups of players. In a market with strict quality standards, the large geographic distribution of grower members allows SWB access to the highest quality wheat.

After the announcement of an official business plan and an equity drive in the fall of 1997, SWB choose a strategic location for its manufacturing activities. A site near Atlanta, Georgia was selected based on favorable population growth and consumption trends and competitive transportation rates. Given the higher cost of transporting the final product in relation to the raw material, the manufacturing plant was located near its largest consumer market rather than the source of the raw product. As a result of the equity drive, SWB was able to open its first plant without debt in June of 1999.

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**SPRING WHEAT BAKERS** (continued)

Since then SWB has formed an alliance with Rich Products Corporation, an international food marketing company based in Buffalo, NY. As part of the alliance, a specialty bread produced by SWB will be sold in Perkins Restaurants. In an industry that is highly dependent on quality and quantity controls, SWB hopes to capitalize on its core strengths of integrated supply chain management and strategic alliances.

**SOURCES**

Bonham, Kevin. Good news on the Rise: Spring Wheat Bakers growth Highlights Grains Conference. Agweek Online. 13 December 1999. Retrieved 1 September 2000 from <http://www.agweek.com/docs/1213/1213grains.htm>.

New Generation Co-operatives on the Northern Plains website. Retrieved 1 September 2000 from [http://www.umanitoba.ca/afs/agric\\_economics/ardi/unitedspring.html](http://www.umanitoba.ca/afs/agric_economics/ardi/unitedspring.html).

United Spring Wheat Processors Co-op Organized. Prairie Grains 2 (1996). Retrieved 1 September 2000 from <http://www.smallgrains.org/Springwh/May96/USWP1.htm>.

USWP To Enter Frozen Dough Business. Prairie Grains 10 (1997) Retrieved 1 September 2000 from <http://www.smallgrains.org/Springwh/Nov97/USWP.htm>.