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One of the path-breaking studies in this area, Coordination of Supply and Demand in the Dairy Marketing System - with special emphasis on the potential role of farmers co-operatives as market coordinating institutions, was published in 1989. Thereafter Petri Ollila has published numerous studies in marketing system's design applications, in both developing and industrialized countries.

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# **Editorial**

This volume is devoted to agricultural co-operatives. It comprises four papers and two case studies, all of which are based on extensive empirical bases, though of very different kinds. All six works were first presented at two international conferences, titled "Vertical Markets and Co-operative Hierarchies: The Role of Co-operatives in the International Agri-Food Industry", held in 2003 in Bad Herrenalb, Germany, and in 2004 in Chania, Greece, respectively.

Agricultural co-operatives have members who are business people. Hence, they are subject to competition – competition between the co-operative and investor-owned firms (IOFs), competition between different agricultural co-operatives, nationally and internationally, and competition between the members with a specific co-operative. There is also so-called vertical competition, i.e., all the firms within a value chain, among them consumer co-operatives, other agricultural co-operatives and production or labour co-operatives, fight each other to get as much as possible of the value creation.

If an agricultural co-operative does not succeed well in this competition, the consequences can be disastrous for the farmer-members. In case of a marketing co-operative, the members will get a poor price for the raw products (milk, grain, potatoes, grapes, etc.) they deliver to their co-operative – even so that they risk being forced out of business. An option for them is to deliver their supplies to another buyer – another co-operative or an IOF.

While economic factors are the essential ones for the members of an agricultural co-operative, and hence, economic theories are the most valuable tools for analysing agricultural co-operatives, also social and psychological variables may have a role in the relationships between the co-operative and its members. This is the topic of the Westerlund-Åkesson article. The authors show that many Swedish farmers remain members of and suppliers to a meat co-operative, even though this one pays a lower price the then IOF competitors. In the long run, this is due to change – members who think and act ideologically are older and smaller producers. Unless the co-operative does not succeed to raise its price level, the survival of the co-operative is threatened.

The relationship between co-operative ideology and efficiency is complex. Strongly ideological co-operatives tend to have difficulties on competitive

markets. Only if the members are willing to and capable of trading economic inefficiency for ideological benefits, a co-operative can act strongly ideologically.

But co-operative ideology can also be efficiency-raising, provided that it is implemented with care and in small portions. Ideology may be socially attractive, which may mean that farmers are attracted to the co-operative. Thereby the processing volume rises, which may lead to lower processing costs and thereby higher prices to the farmers in their role as suppliers. As is said in Ollila's article, a co-operative may be instrumental to reduce the transaction costs that the farmers have when selling their produce on the markets. Co-operatives may have in important role to "repair" badly functioning markets to the benefit of the members.

As the suppliers to a marketing co-operative are not only suppliers but also owners, there degree of co-ordination in the system can be expected to be better than it would be in a system where the suppliers and the processing firms are independent units. In their role as owners, the farmers have an interest to make sure that the product quality of all supplies is good, that no supplier is sneaking, that the co-operative firm is well-run, etc. A large number of consequences may be expected. Ollila's article focuses on the food safety effects of co-operative business.

Ollila analyses Swedish and Finnish meat processing firms with different ownership forms with respect to food safety in pork. One observation is that historically, the co-operative slaughterhouses were pioneers and far ahead of the IOF slaughterhouses, the reason being that the co-operative business form is superior when it comes to creating good co-ordination within the product flow. However, at present, the IOF slaughterhouses have caught up, as they have developed better operating procedures. The fact that the co-operatives have not been able to keep abreast may be due to misinterpreted ideology, i.e., the open membership principle as well as the equal treatment principle has meant that also less efficient members can continue as members. As IOFs do not adhere to such principles, they are able gain competitive strength by attracting the most efficient farmers.

Guillizou, Perrot and Ruffio state that "Current changes in the agri-food industry question the ability of co-operatives to adapt to new challenges". In their article they investigate one option that agricultural co-operatives have for gaining competitive strength,

namely the formation of so-called strategic alliances. The study is based on empirical material from Western France.

Strategic alliance formation is an extremely important tool for agricultural co-operatives – much more than for their investor-owned competitors. A plausible reason for this is that co-operatives tend to have difficulties in attracting much equity capital, and thereby they can not acquire other firms to any large degree. The members do not want to invest in the co-operative as they need their capital for investments in the farm enterprises, and they require their co-operatives to pay so much for the produce delivered that the co-operative has limited possibilities to build up collective equity.

Many strategic alliances that two or more cooperatives form can be regarded as a first step towards a merger. The large number of mergers between cooperatives can be explained by limited financial resources, i.e., it is cheaper to merge than to acquire the partner. So why not merge in the first place, rather than creating an alliance that might result in a future merger? One answer relates to the balance of power, i.e., one of the partners might not want to give up its independence, at least not at the time of the alliance formation. Another reason might be that the alliance concerns some specific business activities rather than not the entire operations of the co-operative firms.

In the latter type of alliances, it is not necessary that both partners are co-operative firms. As each of the partnering firms may be involved in a large number of other alliances, large networks may appear. Hence, the agricultural co-operatives become integral parts in the agri-food industry at large, making it difficult for the co-operatives to preserve a special co-operative identity.

Most often, the agricultural co-operatives form alliances with partners, which are close geographically, and thereby also similar in terms of market relations, production conditions, etc. However, also cross-border alliances are possible. This is mentioned in the article by Guillizou and Ruffio. The article presents trends concerning the internationalisation of the European dairy co-operatives, and one way to be international is through alliances with foreign partners.

International business activities are today a necessity in many industries, not the least in the dairy industries. As the customers, i.e., the retail chains, are international and have international alliances, also the dairy co-operatives must work internationally. Further, as some of the dairy processors market their products internationally, the others have to follow suit,

otherwise they will get difficulties in finding buyers to their products.

While international marketing activities are very commonplace in the European dairy co-operative sector, there are relatively few examples of transnational co-operatives, i.e., co-operative societies with members in two or more countries. Another kind of internationalisation is that a co-operative owns production facilities abroad – if so, it could also buy milk from farmers in the foreign country, thereby acting towards these farmers as a capitalist firm would do. Also, the "opposite" strategy exists, i.e., that a co-operative bases its processing mainly on imported milk, while the members' milk stand for a smaller part of the processed volume.

Guillizou and Ruffio systematise six main internationalisation strategies for dairy co-operatives, and they present numerous empirical examples of each. In some cases, the internationalisation has reached a stage, where "there is ... no longer any difference with non-co-operative dairy multinational companies". The internationalisation process continues, challenging co-operatives to become more and more business-oriented – this is to the benefit of the members.

Jerker Nilsson, Guest Editor December 2005

# Mission of the Journal

- To act as a medium for the dissemination of best management practise in the co-operative movement
- To act as a medium for the publication and dissemination of research into the management of co-operatives
- To act as a platform for informed debate within the co-operative sector on issues and problems arising from the management of co-operatives
- To act as a vehicle for promoting the professional development and status of managers in the co-operative sector across the management profession as a whole.
- To act as a medium for the discussion and dissemination of the latest thinking in all areas of management that may have a relevance to the practise of management in the co-operative sector.

# What gives agricultural co-operatives a bad name?

Bruce L. Anderson and Brian M. Henehan

#### **Abstract**

Some potential members or others may have a negative attitude towards co-operatives. This paper presents some of the perceptions or attitudes that can result in giving co-operatives a "bad name". Three categories of reasons for a negative image of co-operatives are discussed: 1) reasons farmers may have for disliking co-operatives, 2) misconceptions about co-operatives, and 3) reasons for poor co-operative performance.

General reasons farmers can have for disliking cooperatives include: lack of market alternatives, overcoming monopolistic behavior, large impersonal organizations, and a "bigger is worse" attitude. Negative perceptions about co-operatives can include: abandonment of original purpose, dominance by large members, lack of care about members, government favoritism, seen as socialistic institutions, not really operating as a business, and "top down" co-operatives. Reasons for potentially, poor co-operative performance include: conflicting goals, ineffective management, poor board performance, inappropriate strategy, inadequate capitalization, lack of member oversight, and over sensitivity to members.

Much of the negative image associated with cooperatives is unjustified. A number of factors can enhance co-operative performance and assure that cooperatives avoid acquiring a "bad name". Those success factors include: top quality boards of directors elected by informed members, boards that hire capable managers, develop an effective strategic direction, assure a sound financial structure, as well as members that are constantly vigilant in monitoring the performance of the co-operative, board and management.

# **Key Words**

Co-operative Performance; Management; Governance; Attitudes Towards Co-operatives

#### Introduction

From time to time we hear comments such as: "I don't want to have anything to do with co-operatives", or "Co-operatives are prone to failure", or "I would quit farming before I would deal with a co-operative", or "We do not want to organize as a co-operative because

state law requires that we have the word 'co-operative' in our name."

Yes, some co-operatives have failed, costing members the equity they had invested. Others have not pursued effective strategies for the long run benefit of their members. In still other cases, farmers have had unrealistic expectations concerning a co-operative's ability to exert market power or improve prices. In many cases, co-operatives have probably received an ill-informed or unfair criticism.

Over the years we have observed that if farmers lose money in their dealings with a non-co-operative they rack it up to experience, quickly wipe the incident from their minds, and go on with their lives. However, if the same farmers are actually or believe that they have been wronged by a co-operative, they have very long memories. In fact, we believe some farmers pass their bad experience with co-operatives down from generation to generation. There is nothing inherent in the legal or organizational structure of co-operatives that destines them to poor performance. It all comes down to the behavior, performance and expectations of their boards, management and members.

The purpose of this article is to outline and discuss some of the reasons that co-operatives have acquired a bad name. They are divided into two general categories: reasons some farmers have a general dislike for co-operatives, and reasons for poor co-operative performance. Poor performance includes lose of equity, extended redemption of equity, low or no patronage refunds, unfavorable prices, as well as poor quality of products and services.

# A general dislike of co-operatives by some farmers

#### Lack of market alternatives

As the food system consolidates, farmers are left with fewer alternatives through which to market their products or purchase their supplies and services. People like to have alternatives, and as the alternatives become fewer, they can feel constrained and frustrated.

Interestingly, the last alternative in a market is often a co-operative. Sometimes the co-operative comes about by farmers starting a new organization because of lack of markets or services. At other times, and a source of greater resentment, a monopoly arises by a co-operative merging with another co-operative or buying out a non-co-operative competitor. The surviving co-operative's objective is typically not to create a monopoly and exert market power against members. Rather, it is to achieve greater efficiencies and to provide farmer members with a more secure market for their inputs and outputs. If the firms taken over were having financial difficulties, the surviving co-operatives may be forced to reduce service or product lines. This can also increase the resentment of the dominant co-operative.

Farmers rarely consider the economic alternatives to a co-operative monopoly. They can include: uncompetitive prices, bankruptcy, a non-co-operative monopoly, or no market whatsoever. There is a high probability that any of these alternatives would create a considerably worse situation for producers than a co-operative monopoly.

Some farmer members will resent the co-operative for having a monopoly, no matter how well they are treated. Because members have few alternatives, except to quit farming, the role of voice and voting becomes more important to co-operative democracy. The option of exiting the co-operative has limited strategic value, except if it involves enough members to send a negative message to management. In fact, co-operatives are likely to find that members will become much more critical of their organization if it is the only alternative left.

#### Overcoming monopolistic behavior

If a co-operative achieves a monopoly position it must change its member relations strategy. It cannot yield to its natural instincts that it must behave in a monopolistic manner. Quiet the opposite. The cooperative must make a greater effort to communicate and constructively dialogue with members in an increased variety of mediums, e.g. focus groups, meetings, e-mail, mailings, press releases, web sites, etc. A different tone is required that suggests to members that their co-operative is listening and trying to do what is indeed in their best interests. Also, the co-operative must develop quantifiable measures of how the organization does improve the economic well being of members, and how it makes a difference. For example, a few marketing co-operatives compare their pay price to competing companies.

# Members don't like large impersonal organizations

Many members long for "the good old days" when the closest co-operative facility was just down the road, cooperative headquarters was in a nearby city, members knew all the directors and many employees by first name, and management knew them. But for many cooperative members, those days are gone forever in the name of efficiency and competition. As business organizations operating in increasingly competitive global markets, co-operatives must achieve the necessary efficiency. This is the driving force of most mergers and consolidations. It is a fact of co-operative and non-co-operative business life.

Large organizations reduce the "feeling of membership". Members like to communicate with cooperative officials on a personal, one-on-one basis. Also, they like to vote on as many issues as possible. This is natural and heightens the feeling of membership. One knows someone is listening and voting gives the same feeling of satisfaction as a participative sport - which sometimes it becomes in a co-operative. Mail ballots, cooperative officials personally unknown to members, and the need to communicate via telephone, or e-mail can make the co-operative significantly more democratically impersonal. While a member's physical distance for direct contact can increase with mergers and consolidation, a member's psychological distance to the co-operative has probably increased by a magnitude greater than the physical distance.

#### Overcoming the "bigger is worse" attitude

As co-operatives get bigger they all vow to substitute better member information and education for the personal contact they know will be lost. However, it is not the same thing. In addition, over time either with a change in leadership or when the need to reduce costs arises, member information and education is an easy target for budget cuts. The reason is that it is difficult to measure the return on investment from such expenditures.

Active member communications by the top leadership of the co-operative can be the most effective means of dealing with bigness. While members typically do not require personal attention, they do desire personal contact. After every quarterly board meeting of one major national co-operative, the Chief Executive Officer (CEO) and Board Chair would visit each of their major regions to outline the decisions made at the board meeting, and engage in a question and answer period until there were no more questions. Another strategy is to structure membership through locals, districts and regions in such a way that members know they have access to their regionally elected co-operative officials. Finally, it takes an extra effort in member communications and education when an organization is large. A large co-operative should have the resources and talent to make that happen.

### **General Attitudes toward co-operatives**

Research on farmer attitudes towards co-operatives indicates that among any group of farmers about 30% prefer to deal with co-operatives and are loyal to some degree, 30 % dislike co-operatives in various degrees, and about 40% are more or less indifferent about dealing with co-operatives.

Depending on farmers' individual and group experience with co-operatives, the relationship may take on other forms. Also, co-operatives, individually and as a group, have the ability to influence the shape and position the relationship with farmers.

## Misconceptions about co-operatives

There can be a number of negative misconceptions about co-operatives. The following are some that one often hears.

#### Abandonment of original purpose

This misconception is often packaged in this manner: "This co-operative was started by and for small farmers, and now it has abandoned its original purpose." It is true that the loyalty of small farmers was important to the early success of several co-operatives. However, three facts are often forgotten. First, in the first half of the 20th century most farmers were small. Second, if one reads the history of co-operatives, one will often find that the founding leaders were not small farmers, but farmers with larger operations. And third, the early success of many co-operatives was dependent on the patronage of larger farmers.

While a few co-operatives were formed with the specific intent of serving small farmers, there are not many. In other words, there is rarely an overt effort by large farmers to wrestle control from small farmers. Rather many co-operatives have realized that in order to survive and prosper they need the patronage of large farmers. Many have also come to realize that the true spirit of co-operation is to treat members equitably rather than equally. Equitable means that members equally bear the costs and share the benefits according to their economic participation in the cooperative. For example, small farmers often impose a higher cost on the co-operative per unit of product handled than larger members in terms transportation, storage, administration, quality control, handling, etc.

However, this issue does tend to cause resentment among members. In fact, it is often a case of the cooperative is damned if it does (by small members if it adopts policies favorable to large members) and damned if it doesn't (because larger members will go elsewhere and reduce the efficiency of the cooperative).

#### The perception of large member dominance

Let's apply the old "80 - 20 Rule" to co-operatives. It would suggest that about 20 % of the members are responsible for 80 % of the co-operative's business. On the other hand, the other 80 % of members are responsible for only 20 % of the co-operative's patronage but have 80% of the control of the co-operative when voting is based on one-member one-vote.

There have been co-operative cases where smaller members have been able to capture control of the board, and institute polices to the benefit of small members and the detriment of large members. This may drive those large members away from the co-operative, and consequently reduce the long run efficiencies of the organization. On the other hand, too much dominance by larger members often causes conflict within the co-operative. Including both small and large scale members can be a "win - win" outcome when larger members enhance the efficiency of the co-operative, and smaller members add to increased political and market power.

#### Co-operative practices versus principles

Fortunately or unfortunately, no one wrote cooperative principles in stone and carried them down the mountain. In fact, in academic and popular literature it is difficult to find two identical lists of cooperative principles. (For a comparative discussion of co-operative principles see Barton, 1989). Like the U.S. Constitution, co-operative principles are dynamic and have been adapted to changing business and social environments. For example, today very few cooperatives practice the principle of "cash trading". Most co-operatives currently extend credit to members. Also, two of the eight principles adopted by the International Co-operative Alliance, the global protector of co-operative principles, are of rather recent origin. (Barton, 1989).

Some "principles" may be better described as business "practices" rather than underlying principles. There are only three principles that are essential for an organization to operate in a co-operative manner. They are: net income is distributed according to patronage, democratic control and limited dividends on invested equity. At the same time, the practices of co-operatives are ever-changing, as they should be, to adapt to contemporary situations.

#### Just like any business

One often hears: "It's not a co-operative; it acts like any other business." The implication is that the co-operative should be making non-business like decisions or operating in an unprofitable way.

No doubt about it, co-operatives sometimes do not make decisions that are in the best interest of its members and to the detriment of the organization. For example, some co-operatives may pursue growth and/or diversification for its own sake. This may occur in management dominated co-operatives, where management's compensation is determined by the size of the organization.

On the other hand, co-operatives must remain efficient and competitive. This may mean pruning unprofitable operations, changing the way the co-operative serves members, or cutting services members took for granted.

#### Don't care about members

Occasionally it is stated: "The board and management don't care about members." This usually occurs when a change has been made in the way the co-operative operates. It could be a matter of pushing more responsibility or costs back to members or a reduction of services.

Anyone who has sat through a co-operative board meeting soon realizes that members are usually at the forefront of almost all proposals by management and decisions by the board. As a result, decisions painful to members are often delayed to the extent possible and moderated to reduce the potential impact on members. The problem with this approach is that the strategies eventually adopted may not be as effective as they could, had the board acted quicker and with less concern for the immediate negative impact on members.

#### Government favoritism

Co-operatives are treated somewhat differently than some other types of businesses. Government favoritism can occur in three primary areas: tax treatment, anti-trust legislation and access to cheaper borrowed capital. Generally, competitors do not like to see a playing field that is not level; unless they are the beneficiary. While government favoritism to co-operatives may not directly concern members, the jealousy of firms adversely impacted, may result in demeaning references to co-operatives.

Most co-operatives have the opportunity for tax treatment which eliminates double taxation on operating income. Such types of tax treatment are

afforded to specific groups, such as agricultural cooperatives, credit unions, mutual insurance companies, etc. Competing companies that do not enjoy the same tax treatment may engage in a negative public relations effort against those that do.

Agricultural producers and marketing co-operatives often have the ability "to act together" with only limited structural anti-trust exemption, competitors may complain of the "unfair advantage" co-operatives have in this area.

Farmers, agricultural co-operatives and rural co-operative utilities often have access to borrowed funds obtained through government agency. Commercial bankers have been particularly active in trying to change the legislation that favors co-operatives' access to cheaper borrowed funds. While the claims of government favoritism are often exaggerated, they can contribute to giving co-operatives a bad name in some circles.

#### Co-operatives are socialistic institutions

It is probably unthinkable for younger generations to appreciate the negative connotations of labeling something as "socialistic". But for older generations socialism was directly linked to Leninism, Stalinism and Maoism. The mere mention of these schools of thought, however interpreted, conjured up extremely negative images for most people. It is interesting to note that during the 1950's (and 1960's) a presentation at the American Institute of Co-operation was often devoted to distancing western co-operatives from the socialist co-operatives of Eastern Europe and Asia.

#### Not really a business

There are a few members that view a co-operative more as a social organization than a business. While competitive pressures in the market have generally changed this attitude, there are still members that continue to hold this view.

### "Top Down" co-operatives

In some countries co-operatives are imposed by the government. We typically call these "top down" co-operatives as opposed to "bottom up" co-operatives where grass root members take the initiative to organize a co-operative. The former type is particularly common in developing countries and the latter in developed countries.

In addition to forcing the co-operative on reluctant members, "top down" co-operation has other disadvantages as well. Often there are no other alternatives to government sanctioned co-operatives. Managers and directors may be political appointees. The government may want the organization to pursue a broader set of political objectives such as economic development, providing employment, or implementing government programs.

### Reasons for poor performance

Certainly members will think negatively of their cooperative if it is not performing well as compared to other firms in their industry. But the problem of performance does not stop there. The poor performance of one co-operative can give a bad reputation to all co-operatives. Let's examine various reasons for poor co-operative performance.

## **Conflicting goals**

There are inherent goal conflicts in all types of cooperative organizations. The board of directors has a fiduciary responsibility to, in the short run, act in the best interest of the co-operative even if its actions have a negative impact on members. Examples of this would be increasing the amount of equity required from members, reduction of member services, increasing membership dues or fees, etc. Although such actions are often viewed as negative by members in the short run, the results should benefit members in the long run via a more efficient and financially healthy organization.

Management may pursue goals, with the approval of the board, that are not in the best interests of members. For example, since management compensation is often linked in some way to the revenues of the co-operative, management may pursue growth or diversification for its own sake rather for the benefit of members. In addition, there are times when growth and diversification are the appropriate strategies, but management does not have the experience to effectively implement these strategies.

A polarized membership may have conflicting goals. Members of different age groups, geographic areas or types of farm enterprise may not agree on a set of common objectives.

### **Poor management**

While it has changed considerably in recent years, historically co-operatives were notorious for their unwillingness to offer competitive compensation packages to attract the best or most appropriate management team. As a result, they would not attract managers with sufficient business experience to

manage large co-operatives. Associated weaknesses include managers with insufficient vision and the ability to implement action plans.

Another common fault in co-operatives is the board not giving management sufficient control of operations, interfering with the implementation of co-operative strategies, or just plain meddling in operations. Finally, as member owned organizations, co-operative do not always have the opportunity to provide management with stock ownership or stock options based on a co-operative's performance.

### Poor board performance

One of the common reasons given for poorly performing boards is that co-operative directors do not fully understand their fiduciary roles and responsibilities. The result is that directors may provide too little or too much oversight of the co-operative. The former often happens when performance has been acceptable for several years. The latter often happens when performance has not lived up to expectations and the board tries to micromanage operations. To further compound the situation, some boards may have unrealistic expectations of what can be accomplished in terms of co-operative strategies, goals and plan implementation.

There is significant evidence to suggest that cooperative decision-making process takes longer than that in other types of firms (Henehan. and Anderson, 1994).

# Inappropriate strategies or poor implementation

With a desire to provide their members with "market security", co-operatives often enter the mature stage of the industry's life cycle (Cobia and Anderson, 1989).

That is, they often take over another firm or expand operations at the top of the industry, business or product life cycle. Some co-operatives take over unprofitable operations. The opposite can be also true with an unwillingness to exit money losing businesses, plants, products and services. Occasionally the board or management may have too much of an emotional investment in a particular business or product, or pay too much for an acquisition.

Sometimes co-operatives are not willing or not able to invest in an appropriate strategy. This may be the reason a number of co-operatives market commodities rather than value added products and services. Often co-operatives are accused of being too risk averse.

Because of their close relationship with members, there can be a strong tendency to maintain the status quo. These factors can also inhibit the organization from adapting appropriate strategies. Finally, some cooperatives have poorly implemented otherwise appropriate strategies.

### **Inadequate capitalization**

A common complaint of co-operatives is they do not have sufficient access to adequate capital. Being too dependent on debt is dangerous, especially with new operations or high risk operations. Sometimes co-operatives do not require a significant amount of equity from members. Usually if the return is high enough, members would be more willing to invest larger amounts of equity.

Another reason members are unwilling to invest more equity is because of poorly functioning equity programs, resulting in members not receiving their invested equity in a timely manner.

To maintain adequate capitalization requires excellent cash flow management. Many smaller and even some larger co-operatives have been unwilling to invest in modern cash flow management programs.

# Lack of member oversight

Co-operatives are democratic organizations. There are three major alternatives for members to exert democratic rights: a) by voicing their opinion, b) by voting for directors and other issues, and c) by exiting the organization. To properly carry out their democratic responsibilities members must keep well informed about the co-operatives affairs and performance.

Also, members seem to demand a higher level of trust from co-operatives than from other types of market organizations. While members are often very trusting, if that trust is breached it takes a long time to regain it, if ever. This trust is usually built by a high degree of accurate communications between members and the organization whether from directors, management or employees.

In some cases, co-operatives are lax in providing sufficient, timely information about the organization and operations. For example, many co-operatives provide very little information about their financial performance until long after the end of their fiscal years. Public corporations, by contrast, must publish quarterly financial information on a timely basis. We have also observed that co-operatives tend to provide

less financial information in bad times, probably when members need it most to exert their democratic rights. Also, some co-operatives allocate more coverage in publications to promoting products and services than keeping members informed about financial performance and operations. Finally, as all agricultural sectors have become more competitive, one area that has probably suffered a disproportionate share of cuts is member relations and information.

Members have an obligation to keep informed about their co-operatives. In studies we have conducted, it is obvious that a large portion of members do not read publications or attend co-operative meetings.

### Overly sensitive to member concerns

At times, co-operatives can be overly sensitive to member concerns. This tendency may impede them from adapting the best strategy for the co-operative and have a negative impact on long term financial performance. Examples include: treating members equally rather than equitably, accepting poor quality member products, not matching member production to market demand (i.e. allowing members to deliver whatever they want to produce), not requiring enough equity from members, providing an excess number of subsidized services, and adopting a too defensive corporate culture. We have found in our studies that those co-operatives that are most successful are those that are toughest on members (Henehan and Anderson 1994).

# Summary

There is no reason to believe an organization should be any less successful just because it is a co-operative. Moreover, in this day and age of corporate scandals the likes of Enron, WorldCom, Tyco, Adelphia, one may come to the conclusion that most co-operatives practice a higher degree of ethics and exhibit less greed than a lot of public corporations. However, this does not guarantee financial success for the co-operative and its members.

We strongly feel that much of the bad name cooperatives have acquired is unjustified. However, members, directors and managers must take actions to assure that their co-operatives achieve the maximum amount of success possible.

So what must be done? 1) We firmly believe it all starts with the quality of the co-operative's board of directors. 2) This is primarily the responsibility of members to elect the best possible candidate with top level business and co-operative skills. 3) The board is

then responsible for: the selection of management, development of a strong strategy and implementation of a sound financial structure. Finally, 4) members must be constantly vigilant in monitoring the performance of the co-operative, board and management. If these simple rules are followed we firmly believe that co-operatives can avoid having a bad name.

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# Network and hierarchy in Dutch co-operatives: a critical analysis

Dr. Jos Bijman

#### **Abstract**

In 2001 the co-operative Cebeco Group held the second place on the list of 25 largest co-operatives in the Netherlands. Two years later, it had fallen to position ten; turnover was reduced from almost 4 billion euro in 2001 to just over 600 euro in 2003. For many years Cebeco has been one of the most prominent among Dutch co-operatives. It was a federated multipurpose co-operative, with commercial activities in many industries and many countries. However, as a result of financial problems and member dissatisfaction, Cebeco was forced to downsize.

In this paper I discuss the restructuring processes that are taking place in Dutch agricultural cooperatives in general and in Cebeco in particular. For this discussion I use the concept of governance structure as developed in Transaction Cost Economics. Each governance structure uses a particular set of organizational mechanisms to obtain coordination and motivation. A co-operative is a particular governance structure, making use of different organizational mechanisms. I argue that the restructuring processes taking place among co-operatives entail a shift in the combination of mechanisms used.

This paper is organized as follows. Section 2 briefly describes the major restructuring processes among Dutch co-operatives. In section 3, I argue that the co-operative is a hybrid governance structure, using three organizational mechanisms: norms, price and authority. Section 4 analyses the restructuring processes from the perspective of these three mechanisms. In section 5, I present the case study Cebeco. The paper is concluded, in section 6, with some reflections on the use of various organizational mechanisms by Dutch co-operatives. Appendix 1 gives background information on Dutch co-operatives, such as a list of the 25 largest co-operatives. Appendix 2 gives key financial figures of Cebeco Group.

# **Key Words**

Co-operatives, Hierarchies, Internationalization, Markets, Networks, Restructuring

# Introduction. Restructuring processes among Dutch co-operatives

Over the last 10 to 15 years, Dutch co-operatives have experienced major restructuring processes. I will briefly describe these processes.

#### Increasing market orientation

Traditionally, most of the marketing co-operatives have a strong supply (or supplier) orientation. However, from the 1980s onwards, it became increasingly clear that Dutch agriculture could not continue its strategy of continuous productivity increases (van Dijk and Mackel, 1991). With high production costs (due to high labor and land costs, and strict environmental legislation), and with decreasing market protection, Dutch farmers have a hard time in international competition. Market demand became more important as competition increased and consumers became more demanding. Thus, many marketing co-operatives shifted to a differentiation strategy, focussing on tied customer relationships, brand development and product innovation (Van Dijk, 1999). As the food retail became more concentrated and gained a stronger bargaining position, competition for Dutch marketing coops increased.

#### Attracting additional equity capital

The strategic reorientation of co-operatives, particularly processing and marketing co-operatives, towards more innovation and marketing activities calls for a considerable strengthening of equity capital. While Investor-Owned-Firms (IOFs) can obtain these funds by issuing new shares, co-operatives have to obtain additional equity from their members. Thus, co-operatives introduced different financial instruments to encourage members to put (or leave) more capital in their co-operative (Van Bekkum, 2001). This was only possible by individualizing part of member equity, while traditionally Dutch co-operatives only had collectively owned equity.

#### Continuous mergers

A continuous element of restructuring is the merging of co-operatives. The main goal of the co-operative, providing services to the members at the lowest possible cost, pushed them to permanently seek economies of scale. This implied larger production and

administrative units. The trend of mergers among (neighboring) co-operatives in order to lower costs is particularly visible in the dairy and compound feed industries (see Appendix 1).

#### Internationalization

Given the small size of the Dutch market and the increasing competition from abroad, Dutch cooperatives started seeking growth by international expansion. Internationalization of co-operatives has two elements: one is the internationalization of the the commercial activities and other internationalization of the membership. Internationalization of commercial activities has grown substantially throughout the 1990s (Bijman and Van Tulder, 1999). Internationalization of membership is only a recent development, with still many discussions about its desirability taking place in the boardrooms of the large co-operatives. Cross-border mergers of cooperatives are still rare, one of the reasons being the differences in legislation on co-operatives in the various EU countries.

#### Changing corporate governance

A farmer-owned co-operative is both an association and a firm. The firm (or co-operative firm, CF) is owned by the association. Thus, the members collectively own the CF. Over the last ten years we have seen a change in the corporate governance structure of most large co-operatives, where the CF has become a limited liability company (Ltd) or a Public liability company (Plc), and the association has become a holding company, usually being the 100% shareholder of the limited company (van der Sangen, 2001). This implies a redefining of the allocation of authority between board of directors and management board by giving the latter more authority in operational and even strategic matters. It also implies a larger administrative distance between members of the association and the CF.

Reasons for this changes of corporate structure were reducing liability, spreading risks, and a more formal distinction between the association and commercial activities of the CF.

#### Restructuring federated co-operatives

Most federated co-operatives have disappeared by merging the local co-operatives with the top co-operative (Bijman et al., 2004). In some cases the local co-operatives had grown so large that they preferred to carry out the activities of the top co-operative themselves. Particularly if the activities at the top level involved marketing of products, local co-operatives following a product differentiation strategy developed their firm-specific marketing strategy (including brand

building). In other cases, the main economic activities had been concentrated in the top co-operative. In order to improve the efficiency of transactions between farmers and the top CF, the local co-operatives were either integrated with the top or just dissolved.

# A co-operative as a hybrid governance structure

A producer-owned co-operative is a particular governance structure to organize transactions between the producers and processing and/or marketing firm or between producers and supplying firms. A governance structure is the set of public and private rules that govern an economic transaction. Governance structures are established (or have developed) in order to economize on transactions costs (Williamson, 1985). The governance structure affects the efficiency of a transaction by solving two basic problems of exchange: coordination and motivation. Coordination refers to the alignment of the (interdependent) activities of two or more parties involved in the same transaction. Motivation refers both to providing proper incentives (for investments, effort and commitment) and safeguarding against exchange hazards such as shirking and hold-up.

While Transaction Cost Economics focuses on dyadic relationships (e.g. buyer-seller relationships), social network theory has emphasized that dyadic transaction are embedded in a larger social system (Granovetter, 1985). The characteristics of this social system, such as norms and social ties, influence transaction costs. For instance, if the social system is characterized by high trust, economic actors may need fewer safeguards to protect the transaction against opportunistic behavior.

Williamson (1991) distinguishes three types of governance structures: market, hierarchy and hybrid, with market and hierarchy as the extremes of a continuum and hybrid everything in between. Hierarchy uses mainly administrative control (or authority) and relational contracts as mechanisms for coordination and motivation. Market uses mainly price as mechanism for both coordination and motivation. Hybrid is, according to Williamson, everything not pure market or pure hierarchy. Hennart (1993) has argued that market and hierarchy are only abstract governance structures, and that in reality all governance structures combine elements of market and hierarchy. He further makes a distinction between organizing methods (hierarchy and the price system) and institutions (firms and markets). Hierarchy and the price system are two distinct methods for

organizing transactions. Markets and firms are institutions, which use both of these methods.

The market-hierarchy dichotomy has been criticized by many authors. Two approaches can be distinguished in this literature. First, some authors consider network governance as a distinct form of coordinating and safeguarding economic exchange, which contrasts (and competes) with markets and hierarchies (e.g. Powell, 1990; Jones et al., 1997). The essence of network governance is social mechanisms. Second, others have focussed on the organizational mechanisms used in governance structures. For instance, Bradach and Eccles (1989) argue that besides price and authority there is a third control mechanism that governs economic transactions: trust. Price, authority and trust are independent and can be combined in different combinations and different intensities. Instead of trust I prefer to use (social) norm as the organizing mechanism. As Grandori and Soda (1995: 198) have stated, trust is an outcome that is based on "some other integrative mechanism, such as social norms and identification in the case of noncalculative trust, or reputation and social control in the case of calculative trust".

Thus, there are three mechanisms that are used in any governance structure in order to obtain coordination and motivation: norm, price and authority. In a market-type of governance structure, price is the dominant mechanism. In a hierarchy-type of governance structure, authority is the dominant mechanism. In a network-type of governance structure, norm is the dominant mechanism. In reality, most transactions will be governed by combinations of price, authority and norm. I conclude that most governance structures will be hybrids, not because they are in the middle of a continuum, but because they combine elements of the three idealtypes market, hierarchy and network. In other words, human behavior is directed by three types of incentives: economic, administrative and social.

Using this definition of hybrid, we can easily see that any co-operative is a hybrid governance structure, combining elements of market, hierarchy and network.<sup>2</sup>

#### Market

Co-operatives use prices in the transaction between member firms (MFs) and co-operative firm (CF). These prices have to meet competitive standards, otherwise members will (eventually) turn to other suppliers (in case of a supply co-operative) or customers (in case of marketing co-operative). Prices continue to work as coordination and motivation mechanism.

#### Hierarchy

As the members are the owners of the CF, they can (collectively) use their authority to control the management of the CF. The board of directors, representing the MFs, has ultimate formal control over the CF. In joining a co-operative, farmers sign a contract to accept the formal rules of the co-operative. These rules concern the conditions of the membership as well as the conditions for delivering farm products and/or purchasing farm inputs. Because there is transactional interdependence between the producer and the processing/marketing firm, the technical coordination of the transaction is mostly governed by authority delegated by the farmers to the management of the CF. Thus, while the board has formal authority, the management of the CF has a good deal of delegated (or informal) authority, particularly over operational matters in the MF-CF transactions.

#### Network

Finally, a co-operative is also a social community, characterized by long-term relationships, trust, shared identity, and informal information exchange. Within the social network, members consider each other as colleague's and not as competitors. Because cooperative membership usually implies a long-term relationship, social ties can grow. Social processes result in norms and routines, for instance on solidarity and information exchange. Through these social processes and the resulting norms, relational governance may function to mitigate the exchange hazards (Poppo and Zenger, 2002). Interdependence among the members is mainly of a horizontal (or pooled) kind. This means that they all benefit from the optimal functioning of the co-operative, while not having contractual relationship among each other. Within the co-operative as a social community, many informal rules apply. Jones et al. (1997) discuss four social mechanisms that support coordination and/or motivation: restricted access, macroculture, collective sanction and reputation. These all apply in more or less intensity to co-operatives. It is important to note that co-operative membership is voluntary and that each member has the option of withdrawing. The importance of informal institutions is also clear from the extensive literature on the role of ideology in cooperative organizations (e.g., Craig, 1993). The network-character of a co-operative is also clearly visible in the democratic decision-making process, which gives all members some influence and requires decision-making by consensus (Reynolds, 1997).

### Changes in price, authority and norms

Restructuring processes in co-operatives, as briefly described in section 2, imply changes in both the content of and the balance among the coordination and control mechanisms price, authority and norms.

#### Market

One of the most interesting changes in using price as a coordination mechanism can be seen from the restructuring of the vegetable auctions (Bijman and Hendrikse, 2003). When vegetables were still sold by way of the auction clock, price discovery was a transparent process. Nowadays, prices are established by a broker, mediating between producers and customers. This brokerage process is, by definition, much less transparent. As the brokers are employed by the CF, the firm has the option of taking into account other interests than only those of the growers.

Individualization of society and increasing heterogeneity of member interests (see below) has lead to a more critical attitude of farmers towards the price they have to pay for supplies or the price they receive for deliveries. Farmers complain not only about low prices, but increasingly also about the pricing policy of their own co-operative. The reduction of protective government policies and the greater emphasis of the co-operative firms on firm-specific strategies have made farmers more dependent on the performance of their co-operative.

#### Network

In becoming more customer-oriented, the cooperative reduces its focus on the members. This may result in reduced member commitment, causing serious efficiency problems for the co-operative (Hakelius, 1996; Fulton, 1999). It can lead to free rider, property rights and horizon problems in the investment relationship between MFs and CF (Cook, 1995). It may also lead to higher decision-making costs, such as bargaining costs and influence costs (Milgrom and Roberts, 1990). Members may also loose trust in the CF and, indirectly, in the co-operative as a whole.

Changes in informal institutions are also caused by the growth and internationalization of co-operatives. Geographical growth in general and internationalization more specifically may increase the heterogeneity of interests among the members. Even when all members produce the same products, their interest in logistic processes, in information processes and in decision-making processes may differ.

Another cause of increasing member heterogeneity in marketing co-operatives is product differentiation.

For instance, dairy co-operatives not only process regular milk but also organic milk. The introduction of organic milk in the traditional dairy coops has lead to heated debates on whether the extra costs in processing and marketing should be fully covered by the price received for organic dairy products or be part of total production and marketing costs. In addition, who carries the market risks of these products?

Changes in the function of the co-operative may result in more member heterogeneity. In the Netherlands this is most clearly illustrated by the shift of the vegetable marketing co-operatives from auction to wholesaler (Bijman and Hendrikse, 2003). In the auction system all growers had the same interest: obtaining the highest price. The price was determined, as indicated above, in a transparent process. Nowadays, fruit and vegetables marketing co-operatives also carry out functions like wholesaling, marketing, processing and innovation. These activities require more equity capital, but even more important for social processes within the co-operative, members have different interests in these new functions. In strengthening customer-orientation, marketing co-operatives may have to include in their assortment products that are not produced by the members. Also scale economies may sometimes require including non-member products. This raises the question how to deal with non-members. Can treatment of members and nonmembers be separated? Can the CF make sufficiently clear what the advantages are of membership?

In sum, there are various developments among (Dutch) co-operatives that reduce the strength of network coordination. Social mechanisms such as informal information exchange, establishing a common culture, and social control loose part of their functionality when members' interests become too heterogeneous. A solution to the loss of effectiveness of the social mechanism may be to reduce the size and/or the functions of the co-operative. New and small coops can use restricted access to increase coordination and safeguarding. Information exchange and social control can more easily be developed and applied in small associations. For existing CFs this may not be an option. Therefore, producers are setting up new associations and co-operatives (Hendrikse and Bijman, 2002). Because these new organizations do not have a strong bargaining position vis-a-vis retailers and large processors, they seek collaboration, even with traditional marketing co-operatives. These small new coops have been established in the various parts of the horticultural sector, but discussions about the desirability of this model can also be found in the dairy industry.

#### Hierarchy

Coordination in co-operatives is a combination of horizontal and vertical alignment. Horizontal alignment is important in order to gain economies of bargaining scale and power. Sequential interdependence and therefore vertical coordination has become more important in recent years, as quality throughout the supply chain has to be maintained, as specific consumer demands have to be communicated all the way back to the supplier of breeding stock, and as information about what each stage in the supply chain does has become important for providing guarantees on safety, sustainability and animal friendliness. Product innovation often encourages vertical alignment between producers, traders and retailers. These developments imply a strengthening of information exchange and a centralization of decisionmaking. As operational control lies with the management of the CF, those developments require a strengthening of the authority of CF management. According to Hendrikse (2004), members may increase the efficiency of the co-operative by delegating a larger part of decision-making authority to the management of the CF. While the members, through their association, maintain formal authority, management of the CF obtains informal authority (on both operational and strategic issues). The changes in corporate governance as described in section 2 can be considered as formalization of the changes in hierarchy.

The agency relationship between MFs and CF seem to be turning around. Traditionally, members control the CF by taking joint decisions on strategic and operational matters and having the management of the CF carry out these decisions. Nowadays, the board of directors only controls the CF afterwards. With a strengthening of the formal and informal authority of the management of the CF, the role of principal and agent seem to be reversed. In the transaction relationship, the CF is the principal and the MFs are the agents. In case members deliver a differentiated product, this new agency relationship is a very individual relationship, with individual delivery conditions for almost each member. As such it reinforces the heterogeneity among the members as described above.

In conclusion, we see that the network elements of coordination and motivation diminish in effectiveness, the price mechanism has remained the same or is strengthened (in the sense of becoming more individualized), and the hierarchy elements are reduced as far as member control over the CF is concerned. We will now illustrate these developments

with the example of the restructuring process of federated co-operative Cebeco Group.

### Case study: Cebeco

In 1999, the Dutch agricultural co-operative Cebeco Group was celebrating its 100 years of existence. Because of this achievement, the co-operative was granted the name Royal Cebeco Group. In 2001, Cebeco was the second largest agricultural co-operative in the Netherlands, with a turnover of almost 4 billion euro (see Appendix 2). Two years later, in 2003, turnover had been reduced to only 626 million euro. What happened?

Cebeco was a multipurpose co-operative, being involved in many different activities, from importing feed ingredients and producing pesticides, plant breeding, processing eggs, potatoes and meat, to producing airline meals. Cebeco was a holding company (a group). In the year 2000 Cebeco had more than 200 subsidiaries (majority shareholdings) and participations (minority shareholdings). Its activities were spread over 30 different countries. In 2000, 56% per Cebeco turnover was earned in feed, 36% in food, 7% in seed and 1% in various projects.

Cebeco was a federated co-operative, which means that regional co-operatives are the members of Cebeco. These 22 regional co-operatives together had about 40,000 farmer members. During the 1990s a continuous process of mergers among regional co-operatives took place. In 1994, Cebeco still had 35 members.

Over the last ten years, Cebeco encountered various problems. First, the heterogeneity among the members of Cebeco had substantially increased. A few members had become, through mergers, much larger than the average sized member. Members also had become more specialized co-operatives instead of the multipurpose function they all started from. Second, Cebeco acknowledged the importance of vertical coordination for innovation, maintaining quality and food safety, improving logistic efficiency and strengthening customer orientation. However, it proved very difficult for the Cebeco management to actually achieve this vertical coordination. Partly because the top had no control over the member cooperatives, and partly because the subsidiaries were mainly controlled through financial criteria. Moreover, Cebeco lacked control over several crucial stages (or companies) to really develop an integrated supply chain. The interests of the member co-operatives were too diverse to decide on a coherent investment strategy, so no funds became available for fully implementing vertical coordination.

Third, members felt they had no control over the management of Cebeco. Partly because of heterogeneity of interests among the members, partly because of the allocation of votes, members could not reach coherent decisions. Particularly the large member coops, the producers of animal feed, were dissatisfied with their influence on the strategy of the top CF. Fourthly, financial troubles hit Cebeco very hard in 2001. Feed production and meat processing was affected by animal diseases like BSE and FMD. The terrorist attacks on the Word Trade Center in New York lead to major losses for Delta Dailyfood, a producer of airline meals. Potato processor Aviko, for many years Cebeco's most successful subsidiary in the food industry, encountered severe losses in the USA. All together, these difficulties resulted in a loss of 108 million euro and a reduction in solvency rate from 36 to 18 percent.

Members and banks seized the opportunity to pressure Cebeco management to come up with a radical restructuring plan. This plan entailed the sale of most of Cebeco's subsidiaries and participations. Those subsidiaries that were considered important for their own activities were acquired by particular groups of members. Others were just sold to the highest bidder or to the local management. Given the limited activities left, and the lack of coherence among these activities, one may doubt on the viability of the cooperative. From this overview of recent developments at Cebeco it looks like the financial problems were the real cause for restructuring. However, the losses were only part of the story. Already in the year 2000, the bylaws of the co-operative were changed in order to give members more control over the CF. The board of directors and the advisory board became one body, strengthening the power of the members. Also a change in the allocation of votes (getting rid of a maximum per member) strengthened member influence. Another issue was vertical coordination. While Cebeco had difficulty in achieving this coordination, it can now be achieved by the regional co-operatives because they have gained direct control over several formerly Cebeco subsidiaries.

From this case of Cebeco we can draw the following conclusions on changes in the various elements of the governance structure. As to network governance, members of Cebeco had become heterogeneous in their interests, hampering decision-making in the Cebeco board of directors. This, in turn, resulted in low commitment of the members, for instance in the unwillingness to provide additional equity capital. As to market governance, for many of Cebeco's activities there was no direct market relationship between the

regional coops and the top CF (or only with a few member coops). In the 1980s and 1990s Cebeco had become a conglomerate at a time when conglomerates were considered passé in many other industries. As to hierarchy governance, there was a clear case of agency problem between the members and the management of the CF. Members had limited control over the management of the top CF, partly because of the voting system, partly because of the inability of the board of directors to decide on a coherent strategy. Due to bargaining costs and influence costs, inefficient decisions were being made in Cebeco.

#### **Conclusions**

I have argued that all governance structures combine elements of three mechanisms of coordination and control: price, norm and authority. A producer-owned co-operative is a particular governance structure set up to carry out transactions between producers and a processing/marketing firm or a supplier firm. As producers are independent firms, and sell their produce to the co-operative (or buy inputs from the co-operative) price continues to be an important coordination mechanism.

The efficiency of the co-operative as a governance structure is particularly affected by changes in the other two coordination mechanisms, norm and authority. As a co-operative is an association of farms producing the same (or similar) producers, it is also a social community. In this community, social mechanism such as restricted access, informal information exchange and social control play an important role in coordinating and safeguarding transactions. Increasing member heterogeneity makes these social processes more difficult, potentially resulting in lower member commitment and thus inefficient decisions. Finally, the association and the CF maintain a hierarchical relationship, as the association is the owner of the CF. However, more and more authority is shifting from the board of directors of the association to the management of the CF. Strengthening vertical coordination producers and the CF is one of the reasons to give the management more authority over the transaction relationship.

The case of Cebeco shows that increasing member heterogeneity, inadequate authority relationship, and inability to strengthen vertical coordination leads to inefficient choices by the co-operative. Cebeco, however, is not the only case of restructuring of (federated) co-operatives. In the Netherlands, almost all federated coops have disappeared, for reasons of

strengthening decision-making and vertical coordination. Other, primary, co-operatives are also seeking more efficient structures and procedures. Dealing with (increasing) member heterogeneity seems to be the major challenge.

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#### Footnotes

<sup>1</sup>As Chaddad and Cook (2004) show, there can also be other owners of the CF, as long as the association remains majority shareholder.

<sup>2</sup>Several authors have argued that co-operatives are hybrid governance structure (Shaffer, 1987; Menard, 2002; Iliopoulos, 2003). They all use the Williamson categorization of market, hybrid and hierarchy. This categorization does not bring us much further in analysing changes in the governance characteristics of co-operatives. Therefore, I focus on the organisation mechanisms (i.e. the coordination and control mechanisms) used in co-operatives. Changes in these mechanisms may explain changes in the governance attributes.

## **Appendix**

#### Basic figures on Dutch agricultural co-operatives

Co-operatives in the Netherlands are particularly strong in the milk processing, sugar beet processing, production of animal feeds, processing of starch potatoes, marketing of flowers, marketing of fruit and vegetables, marketing of flower bulbs, and dairy cow breeding. In addition, the provision of credit to farmers is almost completely controlled by one co-operative bank, the Rabobank. Table 1 shows the development of the number of co-operatives in several parts of the agrifood industry over more than 50 years, as well as the market share of co-operatives. While the number of co-operatives has substantially decreased, their market share has actually increased in most parts of the agrifood industry.

The largest Dutch agricultural co-operatives mirror the competive strength of particular parts of Dutch agriculture: dairy, flowers and vegetables. Table 2 gives a list of the 25 largest agricultural co-operatives in the Netherlands. The two largest co-operatives, in turnover, are Royal Friesland and Campina. Together they process 75% of all milk produced in the Netherlands. Number 3 and 4 on the list of largest co-operatives are two co-operative flower auctions: FloraHolland and Aalsmeer. Number 5 is The Greenery, a co-operative marketing organisation for vegetables, fruits and mushrooms.

In number of members, the cattle breeding cooperative CR Delta, is the largest in the Netherlands, with more than 30,000 members. Second is the supply co-operative Agrifirm, with almost 17,000 members among dairy farmers, arable farmers and growers of horticultural products. On the marketing side, Cosun, a sugar beet co-operative, is the largest, with more than 11,500 members. Also the dairy co-operatives are among the largest in number of members, with the two largest firms together having some 20,000 members. To put these figure into perspective: there are about 90,000 professional farmers in the Netherlands.

Table 1. Number of co-operatives and market shares, 1949 – 2002

	Number of c	o-operatives	Market share	of co-operatives
Sector	1949	2002	1949	1998
Provision of credit to farmers	1322	349	50	85*
Supply to farmers	1160	22		
Production of animal feed			29	54
Cattle breeding		1		80
Processing of milk	426	5	84	85
Processing of sugar beets	4	1	59	63
Processing of potato starch	15	1	83	100
Marketing of vegetables and fruit	169	6	98	60
Markeing of flower bulbs		1		51
Marketing of cut flowers	18	4	60	95

Source: NCR; \* estimation

Table 2. Top 25 Dutch agricultural co-operatives (2003)

	Name	Sector	Turnover mln euro	Number of members
1	Royal Friesland	Dairy	4575	11000
2	Campina	Dairy	3655	9084
3	FloraHolland	Flowers	1919	3996
4	Bloemenveiling Aalsmeer	Flowers	1598	3245
5	The Greenery	Vegetables	1570	4150
6	Cosun	Sugar	1321	11693
7	Cehave Landbouwbelang	Supply	751	6149
8	Agrifirm	Supply	660	16800
9	Avebe	Potatoes	635	4338
10	Cebeco Group	Supply	626	
11	CNB	Bulbs	353	1988
12	ABCTA	Supply	330	6205
13	Fruitmasters	Fruit	283	1030
14	DOC Kaas	Dairy	273	855
15	ZON	Vegetables	262	772
16	CNC	Mushrooms	248	352
17	Agrico	Potatoes	227	1279
18	FresQ	Vegetables	192	87
19	CZAV	Supply	184	3162
20	Rijnvallei	Supply	138	2331
21	CONO	Dairy	126	523
22	CR Delta	Cattle breeding	109	30586
23	Boerenbond Deurne	Supply	96	665
24	BGB	Vegetables	81	64
25	Pigture Group	Hog breeding	72	2500

Source: NCR (www.co-operatie.nl)

Table 3. Key financial figures Cebeco Group, 1995-2003

	2003	2002	2001	2000	1999	1998	1997	1996	1995
Turnover	626	1261	3911	3423	3011	2709	2454	2241	2075
EBIT	4.7	29.0	24.7	48.9	51.7	41.2	35.7	40.9	58.9
Group results Depreciation Cash flow	3.6 11.3 14.9	45.2 33.2 78.4	-104.0 49.2 -54.6	22.4 49.7 72.1	31.2 52.9 84.1	7.4 50.8 58.2	20.9 44.0 64.9	21.0 40.3 61.3	20.6 40.6 61.2
Net results co-operative	1.4	39.7	-107.9	9.4	16.3	4.6	14.9	13.5	12.2
Investments	8.1	23.3	62.2	59.4	77.3	52.5	46.2	74.4	23.3
Members' equity Group equity Capital base	117.3 129.8 134.6	121.9 136.5 143.8	88.8 146.0 167.4	210.7 355.5 395.6	222.8 314.9 355.2	200.5 277.4 315.9	230.3 302.5 349.6	151.1 219.5 271.5	139.5 209.4 259.7
Total assets (balance sheet total)	288.0	342.0	898.7	1087.9	984.1	898.9	798.8	727.0	665.1
Group results as % of group equity	2.7	32.0	-29.2	7.1	11.2	2.5	9.5	4.5	4.7
Net profit as % of members' equity	1.2	37.6	-51.2	4.2	8.1	2.0	9.8	4.4	4.2
Capital base as % of total assets	46.7	42.1	18.6	36.4	36.1	35.1	43.8	17.0	17.7

# Internationalisation of European dairy co-operatives

Raymond Guillouzo & Philippe Ruffio

#### **Abstract**

Ongoing changes in the agrifood industry question the ability of agricultural co-operatives to adapt to new challenges and define new market strategies to confront stronger competition. Internationalisation of production and marketing is one of the main answers to these challenges.

Based on an empirical analysis of more than 30 European dairy co-operatives, the aim of this paper is to present the diversity of strategies used by dairy co-operatives on the international scene and to investigate possible specificities by comparison with investor-owned firms. In particular, an issue to be raised is that of perpetuating reference to the co-operative model and principles for cross-border business.

Based on a clustering of international strategies the authors show that many co-operatives are confronted by an internationalisation process (either at milk collection, processing or marketing levels) taking advantage of various specific assets. Partnerships may play a key role as a resource multiplier. Most international strategies do not refer to the co-operative model as a business organisation. Nevertheless, some examples may be identified, where the co-operative model remains the reference coming out of the emergence of European transnational co-operatives.

# **Key words**

Co-operative, Dairy Industry, Internationalisation, Market Strategy, Transeuropean

# **Background**

Ongoing changes in the agrifood industry question the ability of farmer co-operatives to adapt to new challenges and define new market strategies to confront stronger competition on domestic, European and world markets. Internationalisation of production and marketing is one of the main answers to these challenges. Most investor-owned firms (IOFs) and many co-operatives have been implementing this strategy, despite the limitations imposed on the latter.

The aim of this paper is to present the diversity of strategies used by dairy co-operatives on the international scene and to investigate possible specificities by comparison with investor-owned firms. In particular, an issue to be raised is that of perpetuating reference to the co-operative model and principles for cross-border business.

The dairy co-operatives in Europe are a good example. The dairy industry is facing internationalisation process. In a context of international trade liberalisation and of unbalance of the world's milk market, the current trend towards developing dairy product exchanges should continue. The volume of these exchanges has increased 3-fold since 1970, whereas the world's milk production only increased by 50%, from 392 million to 579 million tonnes between 1970 and 2000 (Rouyer, 2002). This industry is probably among the most concentrated businesses of the food sector. At the global level, the recent waves of intense acquisitions, mergers and alliances (almost half of which were international) have contributed to redefining the corporate landscape of the sector. Between 1998 and 2002, 70 % of transactions involved the European continent (Zwanenberg, 2002).

Co-operatives play a key role in the dairy industries of most countries in Europe and around the world (Van Bekkum and Van Dijk, 1997). European co-operatives handle 25 % of the activity of the World's 25 largest dairy companies and represent five of the first ten dairy co-operatives worldwide. Even if they are highly heterogeneous in their structures and strategies (Bijman, 1998; Van Bekkum and Nilsson, 2000), in most countries co-operatives are on the defensive and have to brace themselves to retain their market shares and their brand reputation against non-co-operative competitors (Bessey et al., 2000).

Internationalisation now appears to the largest companies in the sector as an unavoidable strategy (Bremmers and Zuurbier, 1997) motivated by the need to reduce costs (labour, equipment and raw material), to find new openings in a market that has reached maturity in western countries, to maintain and secure their market shares and strengthen their market power, to diversify risks by distributing activities over several distinct areas, to by-pass trade barriers in certain countries or to improve access to capital.

The article is organised as follows. Next, we show that a number of co-operatives are confronted with an internationalisation process. Then we identify six main strategies. Finally, we show that co-operatives take advantage of their various skills and competencies to fit with corporate business. Partnerships may play a key role as a means to multiply resources. Most international strategies do not take the co-operative organisation as a model of reference for business.

# International strategies of European dairy co-operatives

This study³ was conducted in 2001 and 2002 as part of a project, based on collection of documentary data and surveys/polls with expert professionals and managers of dairy co-operatives in various European countries (Guillouzo and Ruffio, 2003). Five countries were chosen for analysis according to their capability to express different structural settings with regard to the overall situation of the dairy sector. In each country, the main co-operatives were surveyed: Belgium (four co-operatives), Spain (nine), France (five), Northern Italy (six), the Netherlands (four), Portugal (one) (see Appendix Table 1).

Analysing European dairy co-operatives in terms of internationalisation of procurement and industrial and commercial activities revealed a true involvement of those entities on foreign markets, even if their presence abroad remains restricted and selective, except for a few major groups. Internationalisation modalities are highly variable.

Six main strategies towards internationalisation are identified (see Appendix Table 2).

#### (1) Raw material procurement

(1a) Procurement abroad. This is a group with few openings abroad and whose concerns are their raw material procurement outside of their national borders. Their aim is to ensure and optimise their procurement by resorting to foreign resources for reasons relating to raw material rates or insufficient domestic production (e.g., Italy).

Italian co-operative Granarolo, for instance, exports very few foodstuffs (3-4% of its turnover at most), has no subsidiary abroad but imports 42% of its total milk procurement from Germany, Austria and France.

(1b) Raw material supply to foreign companies. Conversely to the previous example, a number of small co-operatives that historically have not developed any significant industrial capacities, organised collection activities to supply larger dairy groups, either co-operatives or other. These milk fluxes often pertain to cross-border trade, but not exclusively. That strategy

applies to Belgium (e.g., Cheoux Dairy Co-operative), Spain, Austria and Portugal.

In Spain, some goat milk ventures are based on mutual (national and foreign) capital investments to set up processing capacities. Andalusian co-operatives Sierra de Grazalema, Las Cabezas and Trebujena in 1990 created Fromandal, a common subsidiary shared with Eurial Poitouraine; 70 % of its output goes to the procurement of the latter's French units.

Andalusian second tier co-operative Caprina de Almeria (co-operatives La Pastora and Los Filabres) operates on a similar partnership model with the Lactalis group, whereby they equally invested in 1995 in a frozen curdled goat milk plant to supply the group's processing units in France.

#### (2) Foreign market diversification

(2a) Seeking foreign market openings for products of consumption. This is a basic strategy in many cooperatives with strictly domestic implantations, which have taken on export markets to find growth outlets for their products and make up for the saturation of their traditional domestic markets. Often, those cooperatives have recently tackled the export niche to turn into a steady business turnover as part of a deliberate development strategy.

Some co-operatives do achieve important export turnovers, like for instance the large German co-operatives which, after a restructuring period, are now tackling foreign markets: Nordmilch, Bayerische Milch Industrie get 27% and 33% of their turnover, respectively, on the export market; Humana Milch Union (13%) has established more than one hundred trading subsidiaries abroad. In France, Laïta does 25% of its turnover on exports and in the recent past has instated trading subsidiaries in Germany, Italy and the United Kingdom.

(2b) Seeking foreign market openings for labelled products. Unlike the previous example, this strategy involves co-operatives that specialise in specific character foodstuffs. Engaging in cross-border business is a progressive process which pertains to an increasingly voluntarist strategy in pursuance of traditionally more opportunistic approaches. Product characteristics and production rules exclude any other modalities than direct export sales.

The co-operatives that illustrate that strategy are the Northern Italy cheese making co-operatives, localised in the production areas of PDO (Protected Designation of Origin) labelled products Grana Padano and Parmiggiano Reggiano. In a saturated Italian market, Latteria Soresina, Consorzio Latterie Sociali Mantovane

and Unigrana have for a few years only conducted a policy of exports to markets where the Parmiggiano image could be exploited. They haven't yet invested in specific commercial infrastructures.

In France, the Isigny-Sainte-Mère co-operative gets 40 % of its turnover from exporting top-of-the-range PDO and otherwise protected products (cream, butter, Camember, Pont l'Evêque).

# (3) Taking advantage abroad of a commercial asset or know-how

The aim of this strategy is to take advantage of a foreign market through franchise agreements of a commercial success achieved on the domestic market. A characteristic example of that approach is the French Sodiaal group, one of the first agrifood companies in Europe to develop, in 1969, an original formula which combines production, marketing and sales support. Its Yoplait subsidiary has franchised partners in about fifty countries. The franchise system currently represents its first growth input and Yoplait is the second brand name of fresh dairy products world-wide. Its other subsidiary Candia has gradually developed its international activities since 1977 and is present in Africa, the Middle-East and Asia.

Swiss co-operative group Emmi, whose six plants are in Switzerland, has also expanded abroad (Europe, North America, Asia) through licence agreements exploiting the Emmi brand name and know-how.

#### (4) Activity oriented leadership

This category differs greatly from the previous ones, even if its international access modalities are not specific (industrial or sale subsidiaries, milk collection). It includes co-operatives that chose a leadership strategy based on a defined activity where an international dimension is required (critical activity threshold, market power, access to resources, etc.). That strategy does not preclude keeping more traditional activities, possibly with their own internationalisation approaches (e.g., exports).

The strategic priority of French group Eurial Poitouraine is to develop its goat milk processing activities on the European scale and take the leadership of the sector. The group developed industrial, commercial and raw material procurement activities in Andalusia (the first goat-breeding region in Europe) in partnership with three local co-operatives. Eurial Poitouraine is following there a triple strategy of additional procurement for its French processing plants (about 1/3 of its French collection), local goat cheese production and development of a 100% goat milk cheese market in Spain.

Belgomilk, to a lesser extent, can fall in the same category through its ice cream activities. This priority development axis, thanks to its Ysco subsidiary, ensures 20% of the group's turnover. Eighty-seven per cent of that production is exported within Europe, where it ranks among the leaders of private label products manufacturers. Ysco currently operates in Belgium, the Netherlands and France.

#### (5) Extending the domestic market to Europe

Co-operatives in that group have engaged in ambitious cross-border strategies which consist in taking positions on neighbouring European markets whose geographic and economic characteristics are such that they can be assimilated to extensions of their domestic market.

The geographic areas covered (industrially, commercially and procurement) are included in a global strategy aimed at a high level of business rationalisation, especially in the industrial domain where plants no longer match the local market requirements but are more specially designed to fit with the company's more global policy.

There are two approaches according to the degree of reference to the co-operative model.

(5a) "Co-operative" strategy to the European market. Co-operatives in this category engaged in that strategy by exporting their co-operative organisation model. They aim at creating European co-operatives with members from countries with similar rights and duties.

That approach is best characterised by Dutch cooperative Campina. For twenty years it has followed an ambitious external growth strategy on Dutch territory and abroad alike. The Belgian and German markets in particular have been the focus of its attention, where an original policy of foreign producer integration has been applied. It now ensures 37% of its turnover in Germany, 30% in the Netherlands and 7% in Belgium.

In Germany, it conducted a dual strategy: acquisition of, or capital sharing with dairy companies; partnerships, for instance with the Milchwerke Köln Wuppertal (MKW) co-operative. That partnership gave rise to an original setup in 2001, when MKW was integrated as a special member of Campina. The same deal was cut with the producers of Belgian co-operative De Verbroedering.

Austrian Berglandmilch (alliance in 1999 with Bavarian co-operative Rottaler Milchwerk) and German Milchunion Hocheifel (MUH) are also part of this category. They particularly developed cross-border milk collection from producers who also are their members.

(5b) Group/subsidiary" approach to the European market. Co-operatives in this group follow identical strategies but they renounce their co-operative specificity when tackling a new area. They engage in new countries through non-co-operative subsidiaries (IOF) or partnerships, a way which is not fundamentally different from the international expansion modalities of IOF.

French Co-operative Alliance Agro Alimentaire (3A) is an example. The co-operative engaged an Iberic Peninsula strategy in the early '90s, in particular by taking control of Spanish industrial facilities through take-overs or capital sharing. 3A owns four plants in Spain and collects approximately 400 million litres over there. It has become Spain's fifth largest dairy operator and the Spanish market weights just as much as the French one for that co-operative.

Portugese Lactogal also fits in that type of strategy, but to a lesser extent. It exports products to Spain and is planning to strengthen its position there by developing industrial activities.

#### (6) The multinationalisation approach

This group illustrates the multinationalisation strategies adopted by major co-operatives of the sector. These companies extended their business over the five continents where they control industrial and commercial subsidiaries. There is then no longer any difference with non-co-operative dairy multinational companies. They process high-added-value products (including ingredients) and base their development on their intangible assets (brand names and innovation potentials).

Friesland Coberco is a good illustration. It achieves 60% of its turnover outside of Holland, including 50% in Europe, 15% in Asia, 8% in Africa and the Middle East and 4% in the USA. It owns more than a dozen factories abroad and about twenty in Holland. It has about thirty commercial subsidiaries in more than twenty countries plus a dozen industrial subsidiaries.

Glanbia (Ireland) and Arla Foods (Denmark and Sweden) also fall in that category, albeit on a smaller scale.

# Internationalisation, resource-raising and co-operative identity

The analyses reveals that there is much involvement in entities on foreign markets, even if the presence abroad remains selective and restricted, except in a few major groups. The objectives pursued by dairy cooperatives on the international scene are many and do

not merely amount to the market share issue. Productoriented and capital-oriented approaches do not account fully for such strategies which should also be worth analysing more broadly with regard to resource or specific assets finding or exploiting in an international framework.

Table 2 (see Appendix below) displays the various strategic groups previously identified and highlights the main resources on which each category learns to engage for its international strategy. These resources vary widely, being tangible, intangible, financial or organisational.

- Group 1 strategy relies mainly on raw material resources linked to a discrepancy between industrial capacity and the market potential.
- Group 2 is also within a prospect of physical resource valorisation, where companies seek to resolve the imbalance between their production capacity and their domestic openings. Group 2b in addition exploits intangible assets linked to recognised technical know-how and rules to produce foodstuffs having a specific character (e.g. in a given geographical area).
- Conversely, group 3 mainly relies on intangible assets linked to the ownership of a brand name, technical know-how and organisational skills within a franchise agreement. The stakes consist in voluntarily granting the right of usage to reiterate a commercial success.
- In group 4, the issue is to exploit and sustain the competitive advantages acquired in a defined activity, i.e., know-how, innovation potential or a certain market power. Unlike the proceeding categories, the assets mobilised can be of various types because they depend on the activity concerned.
- Group 5 also makes use of a variety of resources linked to the extension and quality of its product portfolio, its industrial efficiency, brand reputation and innovation potential. Group 5a relies on a strong co-operative identity and organisational resources that allow it to plan an original strategy of gradual membership internationalisation.
- The last category includes companies that exploit the various components of their market power and above all their capability to innovate in Research and Development, which will enable them to take positions on the world markets with low-cost (price competitiveness), good quality and innovating products (including ingredients). The success of their strategy also depends on their

capacity to raise the necessary financial and organisational resources (financial engineering, industrial and financial partnerships, etc.).

All in all, this analysis raises two issues relating to the degree of resource control on the one hand, and to the valorisation of co-operative experience (identity) within those strategies, on the other hand.

The first issue refers in particular to the problem of resource sharing and mutualisation. Partnerships are restructuring co-operative strategies. They make up for structural deficiencies and help provide a leverage effect on resources (Ruffio et al., 2001). They play a crucial role in accompanying co-operative internationalisation. Deeper analysis of the alliance portfolios and fully-owned subsidiaries of 14 of the dairy co-operatives analysed reveals different practices:

- Co-operatives which widely use alliances to prop up their international ventures are already the most internationalised. These partnerships pertain mainly to an outside of Europe commercial rationale and rarely result in joint companies. They are established with partners selected outside of the co-operative sphere. Fully-owned subsidiaries abroad pertain to an industrial rationale within Europe.
- Other companies display a more balanced profile
  with a mix of alliances and fully-owned subsidiaries.
  Partnerships are signed mainly with partners from
  the co-operative world. They are restricted to the
  European level and their vocation is mainly
  commercial and industrial. Subsidiaries are widely
  practised for processing out of Europe.
- The co-operatives which are less committed to international business and favour the European dimension prefer strong alliances (joint companies) with partners not necessarily belonging to the co-operative world.
- Lastly, little internationalised co-operatives with no foreign subsidiaries sign agreements mainly with other European co-operatives for raw material procurement.

Regarding the second issue, the analysis shows that little reference is made to the co-operative model in those strategies and that most identified approaches pertain to strategies or modalities shared with IOFs. The co-operative identity and organisational assets are hardly used in the international context. The only exception involves the co-operative strategy to European development as an extension of domestic markets (group 5.a) with the prospect to create Transeuropean co-operatives with foreign members.

The raw material rationale of group 1b is also a cooperative specificity because it follows the classic model of bargaining co-operatives designed for collective organisation of producers to influence the market structure and behaviour of buyers and/or suppliers. In contrast, groups 2 and 3 by nature rule out that possibility as long as options are open for group 4 or even 6.

Nevertheless, Transeuropean co-operatives are being established and various organisational models have been identified, which reveal a gradual evolution towards full integration of producers from different countries (Guillouzo and Ruffio, 2003). That ongoing reality gives substance to the European Co-operative Society statute project drafted by the European Commission and which will undoubtedly lead to a multiplication of such initiatives. However, the fact that geographic proximity remains an essential factor in this type of initiative may question the reality of the internationalisation process within the European area. Indeed, the ongoing process could also be seen more simply as a move to adapt on a different scale to a new "domestic" market already instated by the EU. Europe could be considered as a new strategic area in a highly concentrated sector with very little room to manoeuvre, in certain countries in particular. From this point of view, most of the initiatives analysed probably participate in a continuous restructuring process that has been ongoing for several decades, with a change of scale (from local to regional, regional to national, national to European interregional, etc.) rather than in radical strategic breaking.

#### Conclusion

In many industries and in the dairy sector in particular, co-operative internationalisation is well under way as regards marketing, industrial production and procurement. The strategies pursued and the modalities applied vary according to the resources available to companies, from which they can expect some competitive advantages. Alliances generate a leverage effect on resources and make it possible to follow several strategies concomitantly. The co-operative identity and organisational model do not appear to be of much use in that context. The initiatives aimed at creating transnational European co-operatives pertain more to a restructuring process within a newly created domestic market rather than to actual internationalisation of activities.

Independently of the various aspects described in this paper, cross-border business for co-operatives which favour this strategy for their own development

#### INTERNATIONALISATION

have consequences on their functioning and lead to managerial and organisational changes. In particular, it raises such issues as long-term decision-horizon, the capability to raise the human and financial means required and for members to keep control of increasingly complex and decentralised organisations. The move is also accompanied by a change in territorial scale.

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# **Appendix**

Table 1: Main features of the analysed dairy co-operatives

(Interviewed co-operatives have their name written in italics)

Co-operative	Country	Milk intake*	Members or suppliers	Export (% total turnover)	Industrial subsidaries abroad	Sales subsidiaries abroad
Berglandmilch	Austria	1160**	22000	30%	Х	Χ
Belgomilk	Belgium	590	4000	72%	Χ	Χ
Belgische Zuivel Unie	-	290	1100			
Laiterie coop de Chéoux	-	210	1100			
Arla Foods	DK/S	7200	17500	47%	Χ	Χ
Alliance Agro-Alimentaire	France	1150	4700	34%	Χ	Χ
Eurial Poitouraine	-	820	3700	15%	Χ	Χ
Laïta	-	1730	6800	25%		Χ
Sodiaal	-	2300	14300	38% (Yoplait) 13% (Candia)	X	X
Coop Isigny Sainte Mère	-	180	870	40%		
Bayerische Milch Industrie	Germany	1400		33%	Χ	Χ
Nordmilch	-	4200	17000	27%		
Humana	-	2450		13%		Χ
Glanbia	Ireland	2450	18700		Χ	Χ
CLS Mantovane	Italy	1000	3000	8%		
Cooperlat	-	140	1500	5%	Χ	
Granarolo	-	500	8000	4%		
Latteria Soresina	-	200	160	10%		
Latteria Friulane	-	1		weak		
Unigrana	-	240	1600	8%		
Lactogal	Portugal	1200	26000	15%	Χ	Χ
Cadi	Spain	65	200	>25% (cheese)		
Capsa	-	800	3250	<5%	Χ	
Caprina de Almeria (goat milk)	-	26		90%		
Copireneo	-	55	80	15%		
Covap	-	200	510	weak		
Fromandal (goat milk)***	-	30	600	90%		
<i>lparlat</i>	-	340	3100	weak	Χ	
Emmi	Switzerland	361	4000	20%	Χ	Χ
Campina	Netherlands	5750	17000	70%	Χ	Χ
CONO Kaasmakers	-	260	520	50%		
DOC Kaas	-	600	750	66% (cheese)		
Friesland Coberco (FCDF)	-	5600	14200	61%	Χ	Χ

Source: various (2000 and 2001 data)

<sup>\*</sup> million liters

<sup>\*\*</sup> included Germany

<sup>\*\*\*</sup> Co-operatives Grazalema, Las Cabezas, Trebujena and Eurial Poitouraine (F)

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Table 2: Main dairy co-operatives' international strategies

	1a	1b	2a	2b	3	4	5a	5b	6
Main strategies	Raw milk procurement		Market diversification		Commerci al asset	Activity oriented leadership	ed national market		Multinatio- nalisation
	Buying	Supplying	Basic product	Labelled products	Franchise		Co-operative strategy	Group/ subsidiary	
Area concerned	Frontier zone	Frontier zone	Europe/world	Europe/world	World	Europe	Frontier zone	Frontier zone	World
Type of products	Raw milk	Raw milk	Basic products	Basic products	Basic products	Basic products	Basic products	Basic products	Basics and Ingredients
Industrial subsidiaries abroad						++	++	++	+++
Sales subsidiaries abroad			++	++	+	++	++	++	+++
MOBILISED RESOURCES									
Quantitative raw milk resource		++	++			-			
Qualitative raw milk resource	-	+				-			
Extent of product portfolio		-	+		+		++	++	++
Product quality			++	++	+	+	++	++	+
Product price			++			+			+
Industrial capacities	++		++				+	+	+
Financial resources					-		-	+	++
Brand			+		++	+	++	++	+
Collective quality signs (protected labels)				++					
Technical knowledge				++	++	++	++	++	++
R & D capacities			+		+	+	+	+	++
National market potential	++	-		-					
Foreign market potential			++	+	+	++	+	+	++
Organisational asset	+			+	++		++		+
Co-operative identity		+					++		
Exemples	Granarolo (I)	Mainly small coops (E, D, Au)	Nordmilch Humana MU, BMI (D), Laïta (F)	Latt. Soresina, CLSM, Unigrana (I), Isigny (F)	Sodiaal (F) Emmi (CH)	Eurial Poitouraine (F) Belgomilk (B)	Campina (NL) Berglandmilc h (Au), MUH (D)	3A (F) Lactogal (P)	Friesland Coberco (NL)

# Strategic alliances: challenges and limits for agri-food co-operatives

Raymond Guillouzo, Pascal Perrot & Philippe Ruffio

#### **Abstract**

This paper presents a synthesis of the findings of a series of studies analysing the practices of alliances in agri-food co-operatives in western France in the 1990s. It presents the main characteristics of the co-operative alliance strategies and analyse the challenges and limits of such strategies. More than 130 agreements have been studied on the basis of interviews with management of the co-operatives.

The study shows that strategic alliances closely structure the course of development of agri-food cooperatives. Alliances are a way to adapt to the reality of markets and to competitive conditions. It also demonstrates that the behaviour of the co-operatives may vary a lot in that respect.

A comparison with the food industry in general emphasises certain features of co-operative practices (solidarity, proximity, parity and polarity). Systematic resort to alliances raises the question of the limitations of these choices and their consequences for the operation of firms in terms of activities and organisational issues. Involvement in a network, committing human, financial and physical assets, makes the agency relation within co-operatives more complex. Thus the capacity to implement agreements is a strategic potential for the firm.

# **Key words**

Co-operative, Strategic Alliance, Alliance Portfolio, Partnership, Food Industry

# The importance of strategic alliances

The development of inter-firm alliances<sup>4</sup> has engendered a wealth of studies over the last decades. Those studies show that partnership strategies are part of a pattern, serving a range of purposes: lower transaction costs or agency costs, an enhanced portfolio of skills and resources, improved competitive position, etc.

There are few studies of this issue specific to the agrifood sector. Considerations of partnership arrangements deal mostly with vertical relations and the challenges they involve. Nevertheless, horizontal alliances are recurrent in this industry, representing 16

per cent of restructuring operations in the 1990s in France, for example (Guillouzo & al., 1999).

Current changes in the agri-food industry question the ability of co-operatives to adapt to new challenges. Strategic alliances are assumed to play a great role in supporting the development of agri-food co-operatives but few in-depth analyses have been conducted. This is a way to ensure the existence of these organisations (Cook, 1995). It is also a way to consolidate financial positions, to concentrate supply up-line in the food chain (co-operative federations, joint subsidiaries) or to promote the development of processing activities (Nilsson, 1998).

Van Dijk and Mackel (1991) argue that partnership strategies among co-operatives and with conventional firms are the way forward in the current economic context particularly in the realms of R&D, product development and production. Hackman and Cook (1998) suggest such strategies are amply warranted when it comes to developing commercial outlets and setting up globalisation strategies. Evidence is also adduced for their value in R&D (King, 1995). Mauget and Hamon (1994) have examined the challenges of partnership arrangements between agricultural cooperatives and investor-owned-firms (IOFs).

Other authors are more critical. Dobson (1992), investigating joint-venture practices in the U.S. dairy industry, argues this is not a viable long-term instrument. He presents alliances as an alternative to mergers where cultural hurdles are to be overcome. This is a conclusion shared in the case of cereal cooperatives by Fulton et al. (1996) and by Reynolds (1995) (cited in Fulton & al., 1996), who sees alliances as stepping stones towards mergers.

Federations of co-operatives (second tier co-operatives) also elicit reservations emphasising cultural and economic obstacles (e.g. Foxall, 1981; Nilsson, 1994; Kyriakopoulos and Van Bekkum, 1999). Lastly, this issue regularly arises in European Commission regulation drafting proceedings to find a legal standing for European co-operatives (Galle, 1997).

This paper presents a synthesis of the findings of a series of studies analysing the practices of alliances in food processing co-operatives in western France<sup>5</sup> in the 1990s. More than 130 agreements have been studied

on the basis of interviews with management of the cooperatives (Ruffio & al., 2001; Perrot & al., 2002; Ruffio, 2004). The aim of the study is to assess the relevance of such strategies in a complex environment.

### Types of alliances

The study of western France and the analysis of the historical development of a few large co-operative groups in France (e.g. Sodiaal) show that strategic alliances closely structure the course of development of agricultural co-operatives. The number of alliances ranged from 3 to 25 for the various co-operatives over the study period.

Whereas 20 per cent of restructuring operations in French industry come within the category of alliances and this figure is of the same order of magnitude (16 per cent) for the food processing industry, it reaches nearly 40% in the specific case of co-operatives in Brittany.<sup>6</sup> Moreover, professionals in French co-operative circles have long encouraged such initiatives and regularly proclaim their success in the media.

A review of the alliance portfolios<sup>7</sup> of the 20 leading co-operatives in western France shows how alliances contribute differently to the development strategy of co-operatives (Perrot & al., 2002).

1. For some co-operatives, alliances are an opportunistic practice and are only a marginal instrument in their strategy. Agreements are a "second tier" strategy and are not evidence of a predetermined approach. They merely provide an ad boc solution to a problem (disengagement, optimisation of an industrial tool or brand development). These practices are adopted by firms anxious to retain control of their development potential.

Alliances are not categorically rejected *per se*. They may be strategic opportunities or quick-fix solutions to achieve certain ends. When they do conclude alliances, such co-operatives usually avoid balanced bilateral relations. By promoting a large degree of complementarity of resources, they engage their partners on a course towards asymmetric power relations (reflecting their respective economic positions).

2. Other co-operatives practise alliances to engage in *strategies of concentration on traditional activities* to maintain a critical size. Portfolio composition reflects a concern for clustering and solidarity among co-operatives fighting for their survival. These portfolios are put together as part of a merger rationale and are more to do with the

implementation of somewhat defensive strategies.

The approach relies on proximity partnerships as part of a logic of a gradual coalescence. Under these circumstances it is hardly surprising to see the portfolios typically contain agreements between geographically close co-operatives and focus on up-stream functions as a first step towards broader and closer co-operation. This type of portfolio may reflect a transitional stage pending subsequent mergers.

- 3. For other co-operatives, alliances principally reflect *a movement to reinforce a line of activity*. They seek to achieve a critical mass and to cut costs, with the assets grouped being complementary or similar.
  - As before, partnerships are forged mainly with other co-operatives and have a regional dimension. The predominant legal form is the joint venture, although there is a proportion of second tier co-operatives. However, although the agreements generally cover the entire value chain, unlike the previous category, they only cover one of the co-operative's activity.
- 4. In other cases alliance strategies are aimed at *lateral diversification* developed from a basic business, often with investor-owned firms. The aim is generally to consolidate the core business while seizing opportunities for synergies on the basis of complementarity partnerships. In almost half of the cases identified these partnerships go along with material investment, reflecting an intention to make a lasting commitment and to extend or update the production tool.
- 5. The final group of co-operatives practices *a predetermined and active policy of "contractual" growth* (core strategy) on the basis of partnerships which are diverse in terms of activity, geographical dimension and partners.

These businesses have extensive agreement portfolios which are fully engaged in the development of the firm's industrial activities and become inseparable from it over time. These firms have therefore given precedence to this development lever over other forms of restructuring and conduct an active policy of alliances. This is generally the means they have to ensure their activities have an impact as they grow.

Over the course of time these portfolios structure a good part of the firm's assets (shared industrial tools, collective brands). They then become complex to manage and are increasingly "integrators" of the activities of different partners. They inevitably end up raising questions about the control and command of these partnerships.

These types of alliance portfolio reflect differences in behaviour between co-operatives but there is the question of whether their partnership practices are not the expression of a course of development that is specific to user-oriented organisations.

# Characteristics and features of alliances in co-operatives

A comparison with the food industry generally (Guillouzo & al. 1999) allows us to emphasise certain features of co-operative practices which we summarise under four themes below.

#### Solidarity

The significance of restructuring agreements compared with other industrial sectors reflects a logic of "solidarity" expressing the partners' ambition to find solutions to save, maintain or protect activities by pooling resources. Many agreements aim to organise certain activities or to structure the food chain but also to set up entry barriers or to effect a gradual disengagement from certain doomed sectors.

Under these circumstances, the partnership approach often seeks to preclude sudden upheavals in the economic environment.<sup>8</sup> It shows the ambition to proceed by gradual, negotiated steps, safeguarding the interests of the partners in these activities and of local communities. However, this way of doing things may only retard inevitable change or delay the process of becoming aware of the situation while effecting suboptimal allocation of resources which may be even more detrimental in the long run.

#### **Proximity**

Proximity is an obvious characteristic of alliances practised by co-operatives. Agreements are frequent among regional actors, whether other co-operatives or IOFS. Whereas French firms (of all types) in more than half of cases look for a foreign partner, co-operatives favour local partnerships in that, in our sample, 50 per cent of their allies are based in western France (Table 1). The concept of proximity recurs also in the type of partners favoured, as 57 per cent of alliances are exclusively among co-operatives.

Alliances are largely governed by co-operatives' concern to control their economic environment and organise the development of their activities. The density of co-operatives and SMEs<sup>9</sup> around them in

Table 1: Choice of alliance partners

Partner nationality (%)	Food industry (except beverages)	Co-operatives in western France
France (including western France) Europe Asia North America South America Africa Total	42.3 31.2 15.9 5.3 3.7 1.6 100.0 (n=189)	79.1 (50.0) 17.2 0.7 - 1.5 1.5 100.0 (n=134)

western France is one of the main factors behind this regional logic.<sup>10</sup> This proximity, while providing undeniable advantages, is liable to induce somewhat negative effects by limiting partners' scope for freedom and their capacities to adapt to a changing environment.

#### **Parity**

Many bilateral or multilateral alliances<sup>11</sup> involve relations on an equal footing, which indicates that cooperative principles are extended to alliances. While it is accepted that such alliances may pave the way for subsequent mergers of activities, the stability of such equilibria may also be a brake on further integration, particularly because balanced arrangements regularly raise problems of leadership. The difficulties associated with leadership may entail a risk of reaching a strategic dead-end when members hesitate over which way to go.

An advantage of balanced partnerships is that they allow extra partners to become involved and give new impetus to development, even if this is not necessarily an easy situation to handle. This has occurred several times in alliances where new partners were progressively brought on board.

#### **Polarity**

The renewal and proliferation of agreements among partners lead to the formation of networks. This strategy is generally part of a centrifugal logic of increasing outsourcing of certain functions or activities, the objective being to attain a critical mass or gain market power while avoiding concentration through mergers and acquisitions. It provides a way to manage the multi-purposeness of activities and the businesses multi-purpose co-operatives. Coordination of these activities is outsourced in the framework of different joint subsidiaries (cooperatives or non-co-operatives). However, in many instances these subsidiaries also tend to progressively concentrate decision-making power for the business or activity in question.

The networks of alliances analysed do not always enjoy and do not always implement all the right conditions for creating a competitive advantage in the market. The wealth of literature on this (Gomes-Casseres, 1994; Hamel and Prahalad, 1994) shows the need to comply with certain conditions, which is not always the case in agricultural co-operatives:

- to associate different types of actors able to perform industrial, financial, service or commercial functions in a complementary way,
- to rely on relationships of trust, solidarity and strategic coordination around a few "leader firms" in their sphere,
- to identify complementary skills and promote innovation.

### Limitations and challenges of alliances

Alliances are a way for co-operatives to adapt to the reality of markets and to competitive conditions. However, systematic resort to these practices raises the question of the limitations of these choices and their consequences for the operation of firms.

# The inadequately enhanced development potential of alliances

Alliances are an effective lever for attaining economies of scale, for acquiring a critical mass on certain markets, for making big investments in industrial plants or developing commercial infrastructures (logistics, common brands, etc.). Many alliances are designed as a means of attenuating the brutal effects of more radical integration and are intended to prepare the way for subsequent mergers. Managers therefore prepare for changes which they sometimes view as inevitable by going ahead with them gradually.

Consequently alliances concluded by co-operatives often aim to offset handicaps rather than combine strengths. Hence it is not sure that co-operatives use the full potential of this tool. In particular, alliances are little used as levers for offensive strategies involving technological innovation or internationalisation, and their contribution to the diversification of activities remains measured.

In mature industries, where there is low potential for growth and where entry and exit barriers are high, competitive interplay is well established and competitors are similar. Strategic options are limited. Such contexts mean there is little predisposition to develop strategies that break with the past, that is, strategies designed to provide new solutions as to how to meet traditional needs.

It is even more difficult to draw up scenarios in partnerships involving co-operatives. Proximity between partners (whether geographical or institutional) with similar competencies elicits similar reference models and information and leads to imitation of behaviour which is of little use in truly strategic innovation, particularly as such firms are generally risk-averse.

#### Increasingly complex relations

The partnership ties developed by co-operatives are frequent, strong, lasting and tightly binding and as such are different from practices in the national food industry. The construction of diversified alliance portfolios has intensified the interpenetration of co-operatives among themselves and with IOFs. Some schemes have reached such a degree of complexity that the resulting contractual and organisational constraints may prove contradictory. The expansion of alliance portfolios, the interpenetration of different or even divergent logics may lead to strategic dead-ends.

The culture of co-operative leaders tends to shift away from initial cohesion based on a political project centred on the idea of service and towards the assertion of coherence built around an economic project defined in relation with the constraints of the environment. Historically the co-operative movement has become structured in most countries by union initiatives and conflicts. Leaders often have a union culture and the co-operative's coherence often relies on an identity forged from a history of common struggle. Thus alliance strategies may be given precedence over classical mergers or take-overs because they guarantee a degree of independence, an identity, and limit the irreversibility of commitments among partners.

The managerial consequences of this are important. Strategic decisions integrate the expectations of other partners in a more collective decision-making process. The strategic horizon, which was often confined in the short term, opens up and requires broader formalisation of the project. Coordination of activities implies the introduction of new instruments, and more elaborate and formal delegation of responsibilities.

#### Redefinition of co-operative functions

One of the most visible outcomes of alliances by cooperatives is the change in their functions. Whereas in the last 50 years they have given precedence to vertical integration and acquisition of technological and commercial know-how, now the co-operative's business includes the aptitude to co-ordinate, to lead a project and to supply a combination of services.

The major challenge facing many co-operatives is to supply services without, however, taking them all on directly. While some co-operatives look to maintain a strong industrial vocation in some processing businesses, others promote a service and interface function with varying degrees of technical or organisational involvement in certain activities. This strategy is particularly necessary because the industrial orientation favoured in the past is not always the most suitable response to the needs of today's members.

Two main lines of change are underway in the organisation of co-operatives, with repercussions for member relations.

The first is part of a logic of technical and economic concentration to construct specialised competitive industrial entities widening their field of action and their area of market influence. The mechanism is articulated around the farmer who makes an adjudication and selects an industrial partner when joining up. This approach transforms the traditional member relationship, which, in France, was based on territorial membership<sup>12</sup> into one of economic efficiency criteria applied to co-operatives conducting activities on a larger geographical scale.

The second is part of a functional redefinition of cooperatives. It commits them to enhancing their interface role to become "resource agencies" in the service of producers. In this model the co-operative selects, organises, co-ordinates and manages a portfolio of relations, allowing its members access to services. This relationship portfolio may take on varied forms from the straightforward contract to the creation of joint companies with a co-operative status or as public limited companies. The co-operative no longer has direct functional activities (or less so). It is at the centre of a double-hinged network with its members on one side and its economic partners on the other. The special relationship with the territory is maintained with members, while the economic activity is freed from the territorial dimension and operates on a wider scale.

#### Organisational issues

The development of alliances combined with the diversification of activities and technological change have overturned the traditional organisation pattern of firms. All functions are affected to some extent by these changes.

The pooling of assets on a large scale and the diversity of the structures and legal forms employed fuel a natural trend towards looser ties between units on the periphery and at the historical core of the cooperative. This arrangement of decentralised

operational units, whose control is by its very nature more difficult to formalise, is resistant to mechanistic and bureaucratic management. This may be a source of much malfunctioning if more flexible forms of coordination are not put in place. Conversely, decentralisation must not be a factor of looser control and lower efficiency. The complexity and heterogeneity of objectives and interests in a crossed-agreement structure entail new constraints. As the objective is to reach compromises among the partners, adjudications in terms of fuzzier time horizons for decision-making are more difficult to make.

For these reasons new co-operative groups may become the seat of centrifugal forces resulting from the progressive break-down of the boundaries of the original entity and the recomposition of their value chain.

The alliances transform the co-operative's organisational boundaries. The existence of portfolios of diversified and fragmented relations presupposes a redefinition of the resource allocation, flow planning and control system which the co-operative can no longer provide in the traditional way using the classical mechanisms for hierarchical management.

Thus we witness a return to contractual forms which tend to set up an "internal market" within the cooperative group (co-operative and subsidiaries, allies and partners) and the introduction of "customer/supplier" relations between operational units and functional services.<sup>13</sup> This logic favours criteria of economic efficiency of a purely incentive character which may lead to the selection of members, the reintroduction of individualised risk processing by activity or by asset, and the break-up of mutual support mechanisms.

#### **Conclusions**

Involvement in a network, committing human, financial and physical assets, makes the agency relation within co-operatives more complex. The heterogeneity of actors exacerbates the opposition between cultures and values while divergences in objectives imply little leeway in the decision process (decision-making time horizon, enhancement of capital versus income or right to produce, economic logic/financial logic, etc.). The diversity of structures, financial instruments and legal forms does not facilitate the exercise of decision-making power and control, particularly as it becomes necessary to share such power.

Care must be taken that factors of distanciation and decentralisation between the co-operative's functional

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centre and its operational units do not lead to a loosening of the social commitments to its members. The multiplication of statuses for people within an organisation (which is the case in such alliance networks) makes for inequality and destroys solidarity. Conversely, alliance logic may be an opportunity to implement "social benchmarking" in the sense of a transfer of good practices from one partner to another.

The capacity to implement agreements is therefore a strategic potential for the firm. Some co-operatives have managed to benefit from it while others have failed in achieving such policies. It is difficult therefore to establish a strict relationship between the practice of alliances and its translation in terms of competitive advantage and performance, thus reflecting a form of causal ambiguity in the sense of Reed & Filippi (1990).

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#### Footnotes

<sup>4</sup>An alliance is collaboration between two or more competing or potentially competing firms which contract to carry out a joint project while maintaining their legal and strategic independence. An alliance is a lasting commitment involving the pooling of certain skills and resources, coordinated behavior by the partners and a share-out of the profits or losses.

<sup>5</sup>France's leading region in animal production and food industry. The bulk of output is delivered to more than 250 co-operatives with over 40,000 employees and turnover in excess of €18 billion.

## STRATEGIC ALLIANCES

'In the 10-year period 1990–1999, 127 restructuring operations were counted in Brittany co-operatives, 54 of which were alliances (43 per cent) (source: Annual reports on business restructuring, Brittany Regional Chamber of Agriculture).

<sup>7</sup>An alliance portfolio is a set of agreements forged by a firm over a period of time. This concept emerged with the development of modern finance and has recently been extended to the spheres of technology and skills.

<sup>8</sup>The meat industry (e.g. poultry) is a good example in western France where co-operatives have often joined forces to effect drastic industrial restructuring.

<sup>9</sup>Some 58 per cent of co-operatives' partners in the study sample are SMEs, 72 per cent of which are IOFs.

<sup>10</sup>French co-operatives are subject to the principle of territoriality, requiring them to operate within a given geographical area.

"Some 76 per cent of the alliances studied were bilateral. The figure is 84 per cent for the French food industry as a whole.

<sup>12</sup>Historically co-operatives in western France developed through the formation of a territorial monopoly to offer their members all the services required by their activity.

<sup>13</sup>An illustration is the introduction and alignment of internal transfer prices on "market price" references for the needs of intra-alliance and intra-group transactions. Remember this is judged an effective way to combat rising management costs of these structures when managers' time is taken up increasingly by adjustment of objectives, distribution of tasks, negotiation and conflict resolution.



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# Pig Producers' Choice of Slaughterhouse: co-operative or investor-owned?<sup>14</sup>

Lena Westerlund Lind and Emil Åkesson,

## **Abstract**

The purpose of this study is to identify what factors influence hog-producing farmers in their choice between a co-operative and an investor-owned slaughterhouse. The study is based on social psychological theories. The empirical basis consists of qualitative interviews with 13 farmers in Sweden. The most important factor is the price that the slaughterhouse pays for the pigs. Also personal relations between different farmers as well as between the farmer and the slaughterhouse's officials are important. The members of the co-operative slaughterhouse do not feel very much solidarity with their co-operative.

## **Key words**

Agricultural Co-operative, Slaughterhouse, Social Psychology, Solidarity

## Introduction

Traditionally, Swedish farmers have remained loyal to their slaughterhouse, and the co-operative slaughterhouses have had most hog farmers as their suppliers. Since the Swedish accession to the European Community in 1995, this pattern has changed.

Until 1995, the Swedish agricultural co-operatives enjoyed support from a national agricultural policy. This support caused the co-operatives to become inefficient, having a large number of plants with overcapacity, a large staff, etc. As the market was suddenly opened, the co-operatives were slow to downsize their production structure, while the investor-owned firms (IOFs) acted rapidly. Hence, the co-operatives had to offer lower prices to the farmers, which meant that many farmers have switched from co-operatives the investor-owned to slaughterhouses. Only between 1998 and 2003 the cooperatives lost 25% of their volume, while the investorowned slaughterhouses lost only 12%. The hog production in Sweden has decreased, and imports of meat products have increased.

This paper tries to throw light over this development. The purpose of the study is to identify what factors influence the hog-producing farmers in

their choice between a co-operative and an investorowned slaughterhouse.

## Methodology

Qualitative interviews with 13 hog-producing farmers were conducted. The interviews were semi-structured, based on an interview guide that was developed on the basis of social psychological theory. The interviewees were selected so that four types of behaviour should be included: those who keep on supplying the cooperative or an investor-owned slaughterhouse, and those who have switched to becoming a supplier to the co-operative or have switched to an investor-owned slaughterhouse. (Table 1).

#### Table 1. Interviewed farmers

Farmers loyal to the co-operative slaughterhouse	4	Farmers who have switched to the co-operative slaughterhouse	3
Farmers loyal to an investor-owned slaughterhouse	3	Farmers who have switched to an investor-owned slaughterhouse	3

The co-operative slaughterhouse investigated is Swedish Meats and the investor-owned slaughterhouses are SLP, Sydkött, and Ugglarp. The farmers and the slaughterhouses are situated in the southernmost part of Sweden, where pork producers and slaughterhouses are numerous and competition is intense.

The theoretical foundation of the article is social psychology, supplemented with Hirschman's theory of exit, voice, and loyalty. The hog-producers are supposed to have interrelations between themselves, and of course, there are relationships between the farmers and the slaughterhouses. In the interaction, learning takes place and information is exchanged. The farmers make experiences, which are compared to their expectations. Information is selected subjectively and interpreted subjectively. The farmers have limited information and their decision criteria could also comprise non-economic variables.

# Farmers' motives for choice of slaughterhouse

The most important reason for a farmer to feel satisfied with his slaughterhouse is that his business becomes

profitable. The profits may come as direct payment, as patronage refunds, or as better genetic hog material (which lowers the cost level).

Interestingly, the farmers supplying to the cooperative slaughterhouse perceive that they get a higher payment, even though price statistics say something else. Ideology plays some part in the reasoning of the co-operative members, but not very much. The reasons for staying loyal to the investorowned slaughterhouse concerns mainly economic factors and better personal contacts.

If farmers decide to leave the investor-owned firm, the main reason is the poorer genetic material of the hogs or that they perceive being poorly informed of the firm's whereabouts. Farmers staying with the cooperative slaughterhouse do this out of tradition, the perceived better genetic material of the hogs, and other farmers' opinion. Those who decide to leave the co-operative slaughterhouse mention poor economic results and low payment but also the fact that the co-operative is not flexible and that they feel anonymous, which result in low commitment. Table 2 provides an overview.

## Exit, voice and loyalty

The farmers' decision to deliver to a co-operative or an investor-owned slaughterhouse can be viewed in relation to Hirschman's theory about exit, voice, and loyalty (Hirschman, 1970). Table 3 exhibits the variables, divided into factors preventing or facilitating the use of exit and voice.

## Farmers as social psychological beings

According to Bauman (1990, p. 136) there are two kinds of actions that the individual is unable to reflect upon when choosing between options. *Habitual* 

behaviour is a result of previous actions, while affective behaviour means that the individual acts upon strong emotions, which means that common sense and logical arguments are not considered. When the individual acts upon emotions or unconscious and uncontrollable mental processes, mental contamination occurs (Baron & Byrne, 2000, p. 107). An action is said to be irrational when it is not a result of active decision-making. This is not to say that irrational actions are inefficient or bad. According to Bauman, irrational actions may sometimes be more efficient than rational ones.

When a farmer, with reference to his old age, decides not to switch slaughterhouse, this might be habitual behaviour. On the other hand, affective behaviour results in the switch of slaughterhouse by the farmer who is discontent with the management of the one he is currently delivering to. The farmer who stops delivering to the co-operative slaughterhouse with reference to the fact that the co-operative has closed a specific plant makes an irrational decision. The rational way of thinking would be to stay with the co-operative as the firm is downsizing its organisation so that it can offer the farmer a higher price for the pigs.

According to Kool (1994. p. 203), farmers usually repeat the transactions with their suppliers for three reasons: (1) they have lack of time, (2) the supplier is used as advisor and expert, (3) it is convenient not having to make a new choice. In a way, the farmer is a buyer of services from the slaughterhouses. Hence, this reasoning may be applied on the farmer-slaughterhouse relationship.

The products offered by the suppliers do not have to be, or be perceived to be, perfect substitutes for one another. This may be an additional reason for the farmer to repeat his behaviour. The products offered by the slaughterhouses are piglets, young sows, and

Table 2. Reasons for staying or leaving the slaughterhouse

Reasons for staying		Reason for switching	
Co-operative	Investor-owned	From co-operative to investor- owned	From investor-owned to co- operative
<ul> <li>Good genetic material</li> <li>Satisfied with the piglets</li> <li>Not worth the effort switching</li> <li>Farmer's old age</li> <li>Good personal contact with the firm</li> <li>Convenient not to switch</li> <li>Co-operative ideology</li> <li>Others farmers' opinions</li> <li>Feeling of ownership to the co-operative</li> </ul>	Payment Flexibility Better economic performance than the co-operative The co-operative's bad financial status Good personal contact with the firm	Payment The co-operative is inflexible Bad management of the co-operative Wants to express dissatisfaction Low risk of leaving an open membership co-operative The co-operative is too large; the farmer becomes anonymous No commitment to the co-operative	The IOF assesses the pigs as being of poor quality Poor genetic material of the IOF Poor information from the IOF

Table 3. Factors preventing or easing exit and voice

	Co-operative	Investor-owned
EXIT - Prevent	<ul> <li>Old age</li> <li>Good genetic material</li> <li>Good piglet producers</li> <li>Professional business partner</li> <li>Satisfaction with the firm's performance</li> <li>Ideology</li> <li>Long-term decision to patronise a slaughterhouse</li> <li>Other persons' opinion</li> <li>Convenience</li> <li>Feeling of ownership to the co-op</li> </ul>	<ul> <li>High direct payment for the pig</li> <li>Satisfaction with the firm's performance</li> <li>Long-term decision to patronise a slaughterhouse</li> <li>Good genetics, fast growing pigs</li> </ul>
- Facilitate	<ul> <li>Low direct payment for the pig</li> <li>The open membership principle lowers the risk; Always welcome back as a supplier</li> <li>Dissatisfaction with the firm's performance</li> <li>A way of expressing dissatisfaction</li> <li>No economic security within the slaughterhouse</li> </ul>	<ul> <li>Maximize owner benefit</li> <li>Incorrect classification</li> <li>Poor genetic material</li> <li>Fewer piglets</li> <li>Dissatisfaction with the firms performance</li> <li>The farmer doesn't own the firm</li> <li>Easy to cease a contract</li> </ul>
VOICE - Prevent	<ul> <li>Bureaucratic organisation</li> <li>Slow decision-making</li> <li>Wish for more personal information</li> <li>No commitment to the co-operative</li> <li>Rigid organisation</li> </ul>	The farmer doesn't own the firm Poor information
- Facilitate	<ul> <li>Good personal contact</li> <li>Skilled staff</li> <li>Feeling of ownership to the co-operative</li> <li>One member – one vote implies smaller farmers have the same influence as larger.</li> </ul>	<ul> <li>More flexible organisation</li> <li>Fast responses</li> <li>Easy to make changes</li> <li>Closer to decision-makers</li> <li>Good personal contacts</li> <li>Skilled staff</li> <li>Larger producer have more influence</li> </ul>

boars. These animals may be of different breeds, and thereby not perceived as substitutes. This means that a farmer may be loyal to a slaughterhouse without being completely satisfied with its performance, as the competing slaughterhouse is not perceived to have a substituting product to offer.

Farmers are often loyal to one slaughterhouse. Thereby the farmer gets a closer contact with the official who handles the slaughterhouse's supplier contacts and is responsible for the piglet supply. The farmers may be loyal to the slaughterhouse because of their good relationship with the official.

One way to get accepted by a group is to imitate the group members. If an individual changes his attitudes or his behaviour in order to adopt the social norms that exist in a group, this is called conformity (Baron & Byrne, 2000, p. 357). As an individual compares himself to others, he has to take a stand on which behaviour that is the preferred one. If the members of a group

have the same ideas, it is likely that an individual will find his own behaviour erroneous and change this behaviour.

A farmer who often meets other farmers may question his own behaviour. If the farmer delivers to another slaughterhouse than the farmers he is seeing, he is probably more prone to consider changing his behaviour compared to if he delivers to the same slaughterhouse. Since co-operative members often meet, the risk is smaller that they meet farmers with a different opinion of which slaughterhouse one should deliver to. This may explain the relatively low number of co-operative members who switch to an investor-owned slaughterhouse.

Social learning is the process when an individual gains attitudes from others. Attitudes may also change through social comparison. This is an individual's inclination to compare himself with others to determine if his view of the social reality is the same as

the view of others (Festinger, 1954 cited in Baron & Byrne, 2000, p. 123). If the individual's view is the same, he will assume that the others' ideas and attitudes are correct. This process often means that the individual changes his attitudes to becoming more like others. As persons, whom the individual respects, speaks positively about a product that he has never tried, the chance is higher that he gets a positive attitude towards it (Baron & Byrne, 2000, p. 123).

When a farmer speaks to a neighbour, whom he respects, this neighbour's positive statements about his slaughterhouse probably influence the farmer's attitude. The probability that the farmer switches to this slaughterhouse increases as a result of this social comparison. On the other hand, if the farmer talks to a representative of the slaughterhouse and gets a positive or negative impression, his attitude is changed through *classical conditioning*, which is learning based on associations.

A reference group is a selection of significant others, to whom the individual compares his behaviour. Significant others are individuals, chosen from a larger group and whose values and reactions are more important than those of others. Normative reference groups establish the norms of the individual's behaviour and reward or punish the individual's actions. A normative reference group may be the family, friends, colleagues, or neighbours. The individual chooses if he likes to be a part of the reference group, and thereby chooses if to adopt the norms (Bauman, 1990. s.42). The reference group influences the individual through socialisation, development of self-image, and norms. The reference group forces the individual to adopt a behavioural pattern similar to the group. The individual's motive as well as decisions can change through collection of information, but these processes are closely related to the individual's group affiliation and self-image (Engel & Blackwell, 1982).

## Social influence within groups of hogproducing farmers

One farmer phoned another one, who delivers to an investor-owned slaughterhouse, before he switched from the co-operative to the investor-owned slaughterhouse. Another farmer asked his neighbour for advice before switching. This neighbour had previously teased the farmer for not switching. The farmer saw his neighbour as a businessman, but regarded himself as a person involved in the co-operative movement. Slowly the farmer started to believe that the investor-owned slaughterhouse was a

better option, since it paid more for the pigs, and started to search for arguments for the change, which he perceived as opposite to his values.

Individuals have norms that they get through relations with others, but there are differences between the inclinations to follow the norms within the group. Norms are easiest explained as expectations of the group concerning the rules of behaviour for the members.

*In-groups* and *out-groups* are terms for "we" and "they", which stands for two groups of people but also two different attitudes. "We" is the group that the individual belongs to, while "they" is a group that the individual does not like to or cannot belong to. For the in-group, the individual feels confidence and security, while he feels suspicion, aversion, and fear for the outgroup (Bauman, 1990. s.42). If the suppliers to a slaughter co-operative feel solidarity, they may form an in-group.

Attribution is the process through which the individual tries to find reasons to other individual's behaviour and to get knowledge about their characteristics and tendencies. Other individuals may be ascribed characteristics that would cause their behaviour. Discounting principle is the tendency to attach less importance to a potential cause to behaviour when there are alternative causes. The augmenting principle means that the individual attaches more importance to a reason if the behaviour remains even though there are factors opposing this behaviour (Baron & Byrne, 2000, p. 57).

Social cognition is the individual's way of interpreting, remembering, and using information about the social world (Baron & Byrne, 2000, p. 80). A scheme helps the individual to understand the social information and influence the social cognition. The scheme influences the individual's cognitions through attention, interpretation, and recreation. The attention decides which information that the individual notices. Information that is not consistent with the scheme is ignored. The scheme also influence which information is re-created from the memory. Since the scheme governs which social information that the individual notices and remembers, there is a risk that disorder is created in the understanding of the social world (Baron & Byrne, 2000, p. 83).

This might explain why some farmers, supplying to the co-operative won't switch slaughterhouse, even if the media reports that the investor-owned slaughterhouse offers higher prices for the pigs. The information is not consistent with the scheme that the co-operative should offer the highest price and it is thereby ignored. One interesting result from the interviews is that suppliers to both the co-operative and the investor-owned slaughterhouses believe that they got a higher payment from the slaughterhouse they deliver to. This implies that some kind of social cognition is at work.

Table 4 below presents a summery of the abovementioned factors, divided according to Hirschman's model of voice and exit.

## **Discussion**

When explaining why they have switched slaughterhouse, farmers usually state one single reason. That factor is, however, often just like the top of an iceberg. Most likely the farmers are discontented with many conditions.

Using voice in a co-operative society is often not sufficient for the members to change the upsetting circumstances, and so, they turn to exit. Many farmers

Table 4. Social psychological explanation to the factors preventing and easing exit and voice

	Co-operative (Social psychological explanation)	Investor-owned (Social psychological explanation)
EXIT Prevent	<ul> <li>Old age (Habitual behaviour)</li> <li>Good genetic material (Not substitute)</li> <li>Good piglet producers (Not substitute)</li> <li>Professional business partner (Social cognition)</li> <li>Satisfaction with the firms performance (Social cognition)</li> <li>Ideology (Reference group, In- and outgroup)</li> <li>Long-term decision to use a slaughterhouse (Convenience)</li> <li>Others' opinion (Social learning, reference group)</li> <li>Convenience (Convenience)</li> <li>I am an owner (In- and out-group)</li> </ul>	High direct payment for the pig (Social cognition) Satisfaction with the firms performance (Social cognition) Long-term decision to use a slaughterhouse (Convenience) Fast pig growth (Not substitute)
Ease	<ul> <li>Low direct payment for the pig (Social cognition)</li> <li>Always welcome back as a supplier – low risk (Convenience)</li> <li>Dissatisfaction with the firms performance (Social cognition)</li> <li>Way of protesting (Affective behaviour)</li> <li>No economical security within the slaughterhouse (Social cognition)</li> </ul>	Maximize owner benefit (In- and out-group)     Incorrect classification (Social cognition)     Poor genetic material (Not substitute)     Fewer piglets (Not substitute)     Dissatisfaction with the firms performance (Social cognition)     I am not an owner (In- and out-group)     Easy to break/not have a contract (Convenience)
VOICE Prevent	<ul> <li>Too large and complex organisation (Social learning, Social cognition, convenience)</li> <li>Slow decision-making (Convenience)</li> <li>Wish for more personal information (Closer contact)</li> <li>No commitment (Social learning, Attribution, reference group)</li> <li>No changes within the organisation (Convenience, Social learning, Reference group)</li> </ul>	I am not an owner (In- and out-group)     Poor information (Closer contact)
Ease	<ul> <li>Good personal contact (Closer contact)</li> <li>Skilled staff (Closer contact)</li> <li>Are an owner (In- and out-group)</li> <li>One member – one vote, gives smaller farmers the same influence as larger (Reference group, In- and out-group)</li> </ul>	<ul> <li>More flexible organisation (Convenience, Social learning)</li> <li>Fast responses (Convenience, Social learning)</li> <li>Easy to make changes (Convenience, Social learning)</li> <li>Closer to decision-makers (Closer contact)</li> <li>Good personal contacts (Closer contact)</li> <li>Skilled staff (Closer contact)</li> <li>Larger producer have more influence (Reference group, In- and out-group)</li> </ul>

do not perceive that they can influence the slaughterhouse's decision. This is a severe problem for a farmer-owned co-operative. As many farmers leave the co-operative, something fundamental is wrong. The interviews indicate discontent with information from the slaughterhouse. The farmers need affirmation. Those who are elected representatives in the co-operative are less likely to switch slaughterhouse. They believe in the firm and can influence its decision-making.

The farmer's reference group normally consists of other farmers, supplying the same slaughterhouse, and often of colleagues in the neighbourhood. Especially, the suppliers to the co-operative slaughterhouse are to a large extent other co-operative members.

The larger farmers have more influence in investorowned slaughterhouses than in the co-operative, since the latter must, according to legislation and by-laws, adhere to a principle of equal treatment, offering the same terms of trade to everyone. All members have one vote, whereby the smaller farmers become more influential than the larger ones, relative to the volumes supplied. The larger farmers have an opportunity to negotiate better terms of trade by switching to an investor-owned slaughterhouse. Hence, they may get higher prices for their pigs.

Many factors influence the farmers' choice of slaughterhouse. Apparently, other persons' opinions, in the form of reference groups and social learning, are important. These variables explain many of the factors presented here. Hence, the slaughterhouses should consider social psychological aspects when making decisions and when dealing with their suppliers. Once a farmer has made up his mind to exit, it is too late to change the circumstances that caused that decision. Therefore, action should be undertaken already when the farmer starts using his voice. In order words, complaints are beneficial to the organisation. Even if it is impossible to change everything that the farmers complain about, the farmers should perceive that the slaughterhouse at least listens to them and that they get an understandable explanation to why no changes are made.

The slaughterhouses must work actively to prevent exit. For the co-operative, this might best be done through promoting in-group feelings. At times when the prices for hogs are high, meetings and courses would support positive in-group feelings, thus reducing members' propensity of accepting unfavourable opinions and attitudes from other suppliers.

Personal contacts, especially with the staff of the slaughterhouses, are an efficient way for the slaughterhouse to receive the opinions of the farmers. The investor-owned slaughterhouses seem to be better at this. They also use such information to make the farmers more content. Meetings and member representatives in the co-operative also have the function of gathering information from the farmers. Perhaps the co-operative culture has resulted in an opinion that all information should be attained through member representatives and at formal meetings. If so, the employees of the co-operative might not feel any responsibility to gather information from members, even though they probably hear more complaints than the elected representatives do.

The closing down of production plants is an infected issue for the co-operative slaughterhouse. Such decisions have been the main cause of many switches to the investor-owned slaughterhouses. The co-operative has not succeeded to explain that plants must be closed in order to make the organisation more efficient and thereby be able to pay higher prices.

An interesting difference between the co-operative slaughterhouse and the investor-owned ones is that the former one sells most of its products as carcasses to other processors, while the latter ones process the carcasses into consumer products. This means that the investor-owned slaughterhouses can buy the amount of hogs that they are able to process with good profitability. The co-operative, following a principle of intake obligation, must buy all the hogs that the farmers want to deliver. Likewise, this principle means that it has to buy from any farmer who wants to deliver. Hence, the co-operative has difficulties in optimizing its production process. It has to produce more meat than it can sell whereby the price is lowered.

### Conclusions

The conclusions indicate how the hog-producing farmers are reasoning concerning their choice of slaughterhouse. Some findings are:

- In general, the farmer is content with his slaughterhouse, provided that he thinks that it maximizes his profits.
- The suppliers to the investor-owned slaughterhouses have one overriding criterion: The slaughterhouse must offer the best price for the pigs.
- Some of the members of the co-operative believe that the co-operative offers the best price, though available price statistics say the opposite.

## CASE STUDY MEMBER CHOICE

- When a farmer switches slaughterhouse, the reason is dissatisfaction with the former slaughterhouse, but the dissatisfaction could concern a variety of factors, not only or even primarily economic factors.
- There is a variety of barriers, hindering farmers to switch – loyalties, lack of objective information about the economic conditions, lock-in contracts with suppliers of genetic material, etc.
- Ideological thinking does have a role to play, though it is not strong, and the ideology could be both co-operative and anti-co-operative.

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#### Footnotes

<sup>14</sup>A prior version of this paper was presented at the conference "Vertical Markets and Co-operative Hierarchies: The Role of Co-operatives in the International Agri-Food Industry", held in Chania, Crete, Greece, on 3-7 September 2004.

# Co-operative slaughterhouses and food safety on pork<sup>15</sup>

Petri Ollila

## **Abstract**

The purpose of the paper is to identify how various institutional arrangements perform in reaching the desired outcomes in maintaining food safety and especially to find out if co-operatives have special characteristics. Institutional arrangements include external rules as well as organizations' internal rules and operating practices. This paper discusses co-operative slaughterhouses' role in the development of food safety during the last decade in Sweden and Finland.

Historically, co-operatives have been founded when imperfections in the market have appeared. This has also been the case in Nordic meat processing. Long before legislative actions for food safety, co-operative slaughterhouses developed quality programs for their member-producers that also included food safety measures.

In the development where the share company slaughterhouses have been able to tempt "better-than-average" pig producers as suppliers there is a danger that the "worse-than-average" producers concentrate into co-operative slaughterhouses. Usually the qualification applies also to food safety issues. Co-operative slaughterhouses must develop means to keep the large and most skilful farmers as their suppliers, even if the traditional "equal treatment" principle is challenged.

## **Key words**

Food Safety, Co-operatives, Marketing Systems, Transaction Costs

## Introduction

Food marketing systems become increasingly complex. It is impossible for a consumer in a purchase situation to determine whether a food item fulfils various criteria of food safety. It is also impossible for an individual actor in the system to determine the consequences of his or her behavior with respect to food safety. This is why society pays special attention to food safety questions through various institutional interventions. There is evidence that consumers are willing to pay more for safe food items (Baker 1999), but they also have an interest in governmental measures to increase food safety.

Increased attention to food safety is an issue in high-income countries as well as in less developed countries (Salay & Caswell 1998). Access to safe food is generally considered a fundamental right. Hence, various aspects of food safety are regularly being discussed. The discussion reached a peak when the BSE and the hoof and mouth disease were found in Europe in 2001. Later the spreading of avian influenza has become a serious food safety problem.

Agricultural co-operatives are the dominating organizational form in many countries' food systems. So, it is interesting to investigate whether co-operatives have any special features in relation to food safety. Co-operatives have a special relationship in transactions between farmer-members and the processing firm. This relationship may also affect food safety.

The purpose of the study is to theoretically explain how various institutional arrangements perform in reaching the desired outcomes concerning food safety, and specifically to identify if co-operatives have any special characteristics. Institutional arrangements include established external rules as well as organizations' internal rules and operating practices.

The theoretical tool of analysis is transaction cost theory. This theory explains the rationales behind various ways of organizing economic systems. The theoretical accounts are illustrated with empirical data, whereby the meat industrys in Sweden and Finland provide the data. Comparisons are made between farmer co-operative slaughterhouses and investorowned firms (IOFs) in these two countries during a ten-year period – 1992-2002.

The article is organized as follows: First, the transaction cost theory is presented as it applies to food safety, followed by some theoretically derived propositions about how co-operatives will perform in terms of food safety. Thereafter, the empirical study is presented as well as the findings. Then, data are analyzed and finally, conclusions are drawn.

## Transaction costs and food safety

Two kinds of human interdependence having an effect on food safety can be found:

• The cost of preventing the hazard vs. the cost of not preventing. The less risk is allowed the higher are the costs of prevention. Without paying and with

good luck, the result may be the same. However, if the hazard becomes reality, the cost may be enormous.

• The cost of preventing human beings from contaminating the food vs. effects of contamination. Interacting parties themselves may act as intermediaries for contamination. The cost of monitoring is an alternative for realized contamination.

In both cases the parties influenced are often other people than those who interact in the process. Thus, economic interdependence becomes widespread. This means that food safety becomes a general issue having an effect on the entire society. Another set of transaction costs is involved if the source of the hazard is difficult to trace afterwards. This means that preventive measures become crucial.

Williamson (1975) presents two modes of transactions: transaction in the market and transactions internally within an organization (hierarchy). The issue of the food safety systems' design becomes similar to the design of governance structure of a marketing system. In both cases the question concerns to what extent it is possible to rely on the market, and where "hierarchical" solutions are needed.

As in other problems of exchange, the market solution would, in principle, be the most transaction cost efficient solution also in achieving food safety. Each party interacting with the system has an incentive to act towards improved food safety. Those people actually take food safety into account in all the processes and transactions. However, considering the assumptions concerning human behavior – bounded rationality and opportunism (Williamson 1975) – the system does not always lead to an acceptable solution. Bounded rationality implies that persons do not always recognize or know what they should do. Opportunistic behavior means that some actors would be free-riders leaving the cost of not preventing food hazards to other actors in the system.

Thus, similar to the problem of marketing system design, a market solution would not always bring the best possible solution, so the market outcome needs safeguards through interventions. The market solution is replaced by governmental rules or administrative actions such as meat inspectors.

# Co-operatives as coordinating institutions

Co-operatives use, in a way, both markets and hierarchies at the same time. They are organizations,

which have internalized transactions between the members and the organization. The members are, however, independent of each other and they can also make market transactions. Thus, the farmers can reduce their transaction costs and uncertainty through the co-operative and at the same time maintain entrepreneurial incentives through the market.

These notions raise several questions. Can the cooperative characteristics be utilized in the improvement of food safety? For instance, do these characteristics provide means for better or cheaper food safety through collaboration and mutual trust, i.e. lower transaction costs? For instance, a slaughterhouse may be hesitant to invest in farmer-members' safety measures or training because there is a risk that a farmer switches to a competing slaughterhouse, and so the investment is wasted. Will it be safer to invest in farmer-members who may be expected to be more loyal than an independent farmer? Are the members more motivated in food safety issues because the benefit or loss will be returned to the same members?

Based on this theoretical reasoning, one may expect agricultural co-operatives to be different from investor-owned processing firms (IOFs) when it comes to handling food safety issues. The main argument is that the specific co-operative characteristics place a positive role in achieving good safety. Next, this study investigates whether there is empirical evidence for this argument.

## Research setting

Food safety is a multidimensional matter. It is related to food quality as well as ethical issues. Because the purpose of this study is to demonstrate institutional arrangements it is not necessary to examine factors affecting the food safety in its full width. It suffices to identify a few types of food hazards that have the potential of being explained by various institutional settings.

Three factors affecting the food safety of pork are selected: Salmonellosis, Trichina parasites, and residues of medical treatments. The first two food safety hazards may result from lacking coordination in the production system. Such a system consists of a large number of activities. To conduct an analysis, one has to identify the system's components. This is done through examining interfaces between the activities.

By technically separable interfaces is meant such individual tasks between which, at least in principle, there could be a market transaction. Division of a subsector into all its technically separable interfaces would

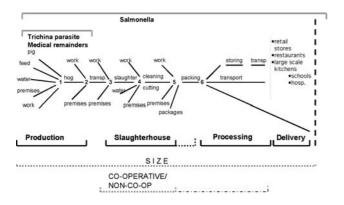
result in an unnecessarily complex pattern. Williamson (1981, p. 1544) states that although more descriptive detail than is associated with neoclassical analysis is needed for this kind of analysis, even "a relatively crude assessment will often suffice".

A general simplified presentation of technically separable interfaces in the pork marketing system is presented in Figure 1. The lines represent single tasks. Critical transactions are presented as numbers.

A combination of piglets, feed, water, premises and work produce a hog. Piglets may be grown either by the same farmer, or they may be sold to another farmer who is specialized in hog breeding (transaction 1). A hog needs, in addition to feed and water, premises and work to grow big enough to be slaughtered. During all its lifetime the hog may need medication. A full-grown hog leaves the farm (transaction 2) and is transported to slaughterhouse (transaction 3). After slaughtering the hog is transmitted to cleaning and cutting (transaction 4). After cutting various pieces are moved (transaction 4) to the stage where they are packed and stored. Depending on the purpose, the pork is then either further processed, delivered to retail stores, restaurants or other large-scale kitchens, or directly to the consumers (transaction 6).

Thus, the pork marketing system is divided into four phases: production, slaughtering, processing and delivery. The combination of transaction modes varies from one system to the other. Piglet production and hog breeding may either take place in the same organization, or the piglets may be sold to another breeder. Slaughtering, cleaning and cutting are usually conducted in the same plant. Further processing may be done either by the same unit, or it may take place elsewhere. After the delivery some processing may occur at retail outlets, restaurants and large-scale

Figure 1: Technically separable interfaces of pork production



kitchens. A trend is that those units utilize increasingly semi-prepared food items.

The key transaction with respect to co-operatives is the transaction between the producer and the slaughterhouse (transaction 3). However, the cooperative has influence on earlier transactions as well. Closer to the consumption stage the influence of a slaughtering co-operative diminishes.

## **Data collection**

The study includes a total of six cases. In each country, Sweden and Finland, three pork marketing systems having various types of slaughterhouses are analyzed; small non-co-operatives (Spånga Gårdsslakteri, S; Maatilaliha Meronen, FI), large non-co-operatives (Skövde Slakterier, S; Oy Snellman Ab, FI) and large co-operatives (Swedish Meats, S; HK Ruokatalo, FI). Small co-operative slaughterhouses do not exist in neither Sweden nor Finland.

The information is gathered through interviews with representatives of the organizations as well as other relevant parties such as administrators. Also a host of secondary data is gathered from Internet, pamphlets, annual reports, etc.

## **Analysis**

Historically, co-operatives have been founded when imperfections in the market have appeared. In the era of comprehensive agricultural policy and closed markets the co-operatives have been able to dominate markets (Ollila 1989). Co-operative members have safeguarded their transaction specific assets, e.g. through their co-operatives' receiving large proportions of members produce.

Prior to Sweden's and Finland's accession to the European Union traditional co-operatives dominated the slaughtering and processing of pork in these two countries. Their position has since declined, but they are still strong. However, their role and activities have evolved. Today, they do not always adhere to the traditional co-operative mode. Co-operative holding companies, partly investor-owned co-operatives and merged multi-national co-operatives have emerged. Nevertheless, many typical relations between co-operatives and their members remain.

The relative advantages of co-operatives tend to diminish along with the improvement of the market performance, even if the improvement is caused by the appearance of co-operatives. As the market changes the behavior of co-operatives becomes more similar to that of IOFs. This development is observed in the case of HK Ruokatalo, one of the leading meat processing companies in Finland and the Baltic countries. A cooperative society controls 37 per cent of the shares and 87 per cent of the votes of HK Ruokatalo. The rest of the shares are traded in Helsinki Stock Exchange. The co-operative also owns another share company LSO Foods Oy, which is the major owner of slaughtering and meat processing premises (c.f. "the hierarchical decomposition principle", Williamson 1981).

Co-operative slaughterhouses have had many activities that are related to food safety. They have provided services for their members. Extension programs, piglet transmitting service and collective feed purchases are examples. Co-operative services have emerged as special quality programs at the farmer level. Examples are Swedish Meats' BIS ("Best in Sweden") and HK Ruokatalo's Kassler. The aim of such programs is to improve the quality of raw material by controlling the quality of pigs, feed, medication and the breeding environment as well as giving advice for improved performance. These programs have been instrumental for improved food safety as well.

In terms of the three attributes of food safety it can be concluded that co-operative programs have significantly contributed to diminishing medical problems as well as salmonella problems. Programs require keeping track of all the medical treatment. The use of antibiotics without justification confirmed by the veterinarian is forbidden and such animals cannot be delivered for slaughtering before a quarantine period. Also salmonella is controlled on production facilities. Programs usually require the use of only non-salmonella certified feed. This all has contributed to salmonella-free pork production in both Sweden and Finland.

Authorities control trichina parasite. Because of fatal consequences each carcass must be inspected, even when the probability of finding trichina is small. Many Swedish interviewees consider the trichina control as unnecessary. The probability of having trichina is larger in Finland because of its long border with Russia.

Co-operative quality programs include tracking production animals' origin and genetic history. This improves the food safety through better quality and traceability of production animals. Programs include regulations that contribute to animals' well-being and production ethics. Examples about such regulations are minimum growing space, ventilation, and loading and transport conditions.

The development of quality programs used to be

stronger in Finland than in Sweden, perhaps because of even more urgent need of quality improvement. Many of the requirements of these programs developed by co-operatives have become a standard for the rest of the industry. Also non-co-operative slaughterhouses have adopted and developed similar programs, e.g. Snellman's Best on the Farm. Likewise, public legislation has adopted many initially co-operative criteria aiming at food safety improvements. Thus, co-operative slaughterhouses have played an important role in improving the food safety in the entire industry.

Control programs are means to control farmers, especially those with the poorest quality. The slaughterhouse gets a better insight in the farmers' operation. The improvements also benefit members directly through a better economic result. In addition to improved efficiency, co-operatives pay an extra bonus (2-3 c/kg) for farmers adhering to the program.

Skövde slaughterhouse, an IOF, has started paying patronage refund-like bonuses to its suppliers. The bonus aims at keeping also IOF suppliers from selling to competing slaughterhouses. However, these IOF programs have little to do with food safety.

Compared to the market-based delivery to an investor-owned slaughterhouse, a member of a cooperative slaughterhouse could, in principle, have a stronger incentive to deliver high quality animals. This is so because in case of a food safety hazard, a lower patronage refund would affect the farmer-members also. However, no evidence about different behavior of co-operative member and farmers delivering to the IOF slaughterhouses can be found. Interestingly, suppliers to small-scale slaughterhouses tend to be more concerned about what happens to their animals after they leave the farm gate.

Sometimes the characteristics and obligations of a traditional co-operative become a burden when a well functioning market arises. For instance, the receiving obligation may turn to a disadvantage when the members realize that there are a number of alternative buyers for their animals. For the co-operative to be efficient, it must have the large and the efficient farmers as members and suppliers. However, the largest members have the best opportunities on the market, and so they can either leave (exit, see Hirschman 1970) or demand better conditions than smaller ones (voice). This process weakens the cooperative's competitive position. In the end, the cooperative membership may consist of only the smallest (often least efficient) farmers, and thereby the cooperative's competitiveness is threatened.

Food safety measures within slaughterhouses are a combination of governmental measures and measures conducted by the slaughterhouse. A significant organizational innovation is the development of the own-control system where food safety measures are divided by the governmental inspectors and the slaughterhouse. Activities are delegated to those who have the best position to conduct them (the hierarchical decomposition principle, Williamson 1981). The data does not show any differences in food safety practices inside co-operative and in non-co-operative slaughterhouses.

The mechanisms discussed above have had an effect on the slaughtering industry both in Sweden and in Finland. Before the EU membership in 1995 the cooperative slaughterhouses were the leading parties in developing measures for improved food safety. Thus since then the EU has taken much of that role. This has contributed to significant changes in the behavior and organization of slaughtering co-operatives. The attributes of co-operatives, including the quality programs, have contributed to the general development of food safety in both countries.

## **Conclusions**

The role and activities of co-operatives, though they remain strong, have evolved. Co-operatives still provide services for their members. Piglet transmitting and extensive quality programs are typical activities of co-operative slaughterhouses although other slaughterhouses have adopted such activities. This development has benefited food safety. Thus, co-operatives have not just improved food safety within their operational environment but also contributed to the improvement of food safety in the rest of the industry. The relative role of co-operatives has, however, diminished when the performance has improved.

The number of co-operative slaughterhouses has fallen as the co-operatives change their roles. One example is HK Ruokatalo, which is now a holding company for the slaughtering and processing IOF. This development indicates the flexibility and ability of co-operatives to change their form between markets and hierarchies according to changes in the market situation.

- Coming back to the two kinds of human interdependence presented in Section 2, the following conclusions can be drawn:
- The cost of preventing the hazard vs. the cost of not preventing: compared to a supplier delivering

to an IOF it is more costly for a co-operative member not to prevent the hazard. If the hazard is realized the members bear the cost. In transactions between members and the co-operative slaughterhouse there is an emphasized attention to food safety. However, differences in activities can be found in different slaughterhouses.

 $\Sigma$  The cost of preventing human beings from contaminating the food vs. effects of contamination: what concerns contamination at the farmer level, a cooperative may have an advantage. However, at the slaughterhouse level there is no difference between a co-operative and an IOF. Another observation is that the monitoring cost per kg of meat in small-scale slaughterhouses is significant compared to large-scale slaughterhouses.

In both aspects of human interdependence some farmer-members regard the co-operative slaughterhouse's image as producer of safe food as a transaction specific asset. However, the study could not identify a clear difference relative to the suppliers to IOF's. This indicates that this potential asset is not exploited enough by co-operative slaughterhouses.

In the development where the IOF slaughterhouses have been able to attract "better-than-average" suppliers, the "worse-than-average" farmers may be concentrated to the co-operative slaughterhouses. Usually the qualification applies also to food safety issues. Co-operative slaughterhouses must further develop means to keep the large and most skilful farmers as their suppliers. This must happen even at the cost of the traditional "equal treatment" principle. That principle must be changed into a "fair treatment" principle. The membership must accept that the co-operative cannot remain in business without the larger farmers, which may require better conditions than smaller farmers.

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<sup>15</sup>This paper is based on the book Ollila, Petri, 2003, Food Safety in Pork – a Study about Food Safety in the Pork Marketing System. Report 151, Department of Economics, Swedish University of Agricultural Sciences, Uppsala, Sweden (178 pp.)

A prior version of this paper was presented at the conference "Vertical Markets and Co-operative Hierarchies: The Role of Co-operatives in the International Agri-Food Industry", held in Chania, Crete, Greece, on 3-7 September 2004.



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NACO is a Management Association and an Independent Trades Union, representing managerial and professional grades within the United Kingdom Co-operative Movement. NACO has sole representational rights for managerial and professional staff in all UK consumer co-operative societies and within the Co-operative Insurance Society Limited.

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NACO also wishes to cross traditional barriers and share practices and experiences with similar minded bodies with links to the worldwide co-operative movement. In this respect, moves are in place to create an affiliate membership to allow fraternal organisations to develop links with NACO in the United Kingdom. Any parties interested in developing such a relationship should contact Lindsay Ewing, General Secretary or Neil Buist, Assistant General Secretary.

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# **A Reflection**

Lovisa Nilsson

Iliopoulos, Constantine, *A study of the property rights constraints in US agricultural co-operatives: theory and evidence.* (286 pp.) PhD thesis from University of Missouri-Columbia, December 1988. Obtainable from UMI Company: http://www.umi.com/umi/dissertations/ (UMI number 9924892).

Constantine Iliopoulos' doctoral dissertation investigates the hypothesis that the property rights structure affects the incentives of stakeholders to invest in a co-operative. Through analyses of the horizon problem, the portfolio problem and the free rider problem, the study tries to assess efficiencies and inefficiencies of the investment incentive structure of agricultural co-operatives.

The first part of the dissertation explains how the property rights structure evolved in agricultural cooperatives, states the objectives of the study, and reviews the development of theories that have been used in explaining co-operative firms. This part presents both neoclassical theories of the firm and new institutional economics as well as the property rights approach.

A comprehensive guide is given of the economic theories, most often used in analyzing co-operatives, and an explanation of how the theories are related to each other. Chapter 3 offers in detail a review of the vaguely defined property rights of co-operatives, especially in connection to expanding co-operatives, which need risk capital.

The author discusses the development of cooperatives and definitions used over the years. He notes that in the US court system and among US authorities, the definition used is the one that USDA came up with in 1987; a co-operative is a user-owned, user-controlled and user-benefiting firm. The definition is thus reinforced by the authorities, and the essence of a co-operative is viewed as a firm fulfilling the definition. Hence, the co-operative form is becoming more static in the USA.

The empirical material of the study consists of collected responses from CEOs and finance officers of co-operatives, giving information on the stakeholder rights, the property rights distribution, financial and organizational characteristics of the selected co-operatives. This information is used for analyses of the horizon, portfolio and free rider problems.

The author is able to show that the co-operative membership policy affects the free rider problem, i.e. co-operatives with open membership policies are subject to more free rider problems than co-operatives with closed membership policies, and co-operatives which assign ownership rights to members in some way are subject to less free riding.

When it comes to the horizon problem, the author shows that transferable and appreciable ownership rights will ameliorate the problems, while without such ownership rights, members pressure the co-operative to pay as much as possible for the members' produce, and they expect the co-operative to borrow for necessary investments. Hence future members have to pay off those debts. Current members try to shift risks from themselves to future generations.

The portfolio problem is not as well supported by the empirical study, the only support being that in multi-purpose co-operatives, members contribute less capital if the capital pool is common compared to what they do if there are separate capital pools.

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# **Environmental Co-operation and Institutional Change. Theories and policies for European agriculture**

Hagedorn, Konrad (ed). Edward Elgar publishing, Cheltenham, 2002. ISBN: 1-84064-841-4 (373 pp).

New roles for co-operative organizations are the focus of this book, or rather new roles related to environmental management. The range of topics is wide, covering the deve-lopment and justification of environmental co-operatives, the internal life and institu-tional setting of these, as well as case studies of environmental co-operatives.

Oftentimes, books including almost twenty contributions run the risk of being too broad and therefore difficult to follow. This is not the case here, mainly due to a very informative introductory chapter, including an overview of the book's structure. A key factor of this first chapter is a figure, depicting "The logic of institutional arrangements for agrienvironmental co-ordination", summarizing the book's contents, helping the reader to see in what way the different topics treated in the following chapters relate to each other.

Slangen and Polman discuss reasons for developing environmental co-operatives, mentioning market failure, asset specificity, and lack of property rights, leading to a discussion concerning governance structures in general as well as in environmental cooperatives and contractual relationships in these. The complexity of formulating well-suited frameworks for transactions is stressed, and the residual control rights - as explained by Ménard (1997), is given as a key factor when determining what type of contract is best suited to use. To exemplify the theoretical part of their article, Slangen and Polman summarize the results of an empirical study of 81 Dutch environmental cooperatives. One interesting conclusion from this study is that reasons for forming environmental cooperatives - as presented in the foundation acts, are "contribution to conservation of wildlife and landscape; continuity of the farms of the members; and consultation with government on behalf of members".

Slangen and Polman also examine design principles for environmental co-operatives, in terms of efficiency and effectiveness, again using the New Institutional Economics-framework. The environmental co-operative is viewed as a club, and the problems of asymmetric information, hidden action, shirking in teams, lack of trust and commitment are discussed. The authors use a mail survey from the Netherlands as

an example of the issues raised, leading to the conclusions that the environmental co-operatives in the Netherlands seem to have the traits of clubs, and that principles for reducing problems due to hidden information, hidden action, shirking in teams, and increasing commitment and trust are important in these organizations.

A third article – the contribution by Mazé, Galan and Papy – aims at identifying some organizational circumstances to reduce quality control costs. They propose that the implementation of normative rules is as important as the governance mechanisms used, in order to reach a successful management system at the farm level. They identify two types of model used in Europe when implementing the ISO-standards: "Direct certification of farms", and "a pyramidal certification with intermediaries", i.e. having an organization between the certifying body and the farm.

In conclusion, this book is a good introduction for those interested in new tasks for farmers and farmer cooperatives, focusing on environmental management.

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**SWEDEN** 

# **Restructuring Agricultural Co-operatives**

Hendrikse, George W. J., ed.. Erasmus University, Rotterdam, 2004. ISBN: 90-5892-057-7 (140 pp.)

The book presents six articles concerning current challenges for agricultural co-operatives, such as increased membership heterogeneity and changed market conditions. The theme of the book is governance structures.

Jos Bijman and George Hendrikse investigate why innovative growers leave the major Dutch marketing co-operative in the fruit and vegetable industry, VTN, to start new co-operatives, and how this affects the VTN. As the market demands differentiated products, the growers benefit from growing products of specific qualities. They are better off in homogeneous organisations, less hampered by conflicting interests. Small, specialised co-operatives give incentives to invest in quality and product innovation. However, the large, heterogeneous VNT benefits from economies of scope and has the ability to offer retailers a variety of goods, off-setting the latters market leverage.

George Hendrikse and Aswin van Oijen discuss diversification and corporate governance. The authors compare diversification in co-operatives and stocklisted corporations, finding that corporations are more differentiated than co-operatives. Their diversification is more extensive in both related and unrelated industries. It is more likely that co-operatives differentiated in unrelated industries than in related. Co-operatives are less prone to invest in related industries since this brings difficulties in distributing the revenues from, for instance, logistic advantages. Unrelated diversification also involves less risk through diversification of the portfolio. Members of a homogeneous co-operative do not want their cative to invest in other industries. They prefer investments in their own farm enterprises. Hence, it is more heterogeneous co-operatives that diversify. This might increase market power since the co-operative is able to offer a wider range of products to the retailers.

Michael Cook, Constantine Iliopoulos, and Fabio Chaddad review the progress in co-operative theory since 1990. The authors identify seven trends. For instance that coalition and nexus approaches have become widely used, particularly to deal with heterogeneity, and heterogeneity has become an important topic. Through agency theory, the importance of management has been enhanced. Principal-agent relationships are essential for the co-

operative decision-making process. Agency theory, along with game theory and theories concerning transaction costs and incomplete contracts, have facilitated studies of corporate governance, which have become increasingly important. There has been a paradigmatic shift. Formal neoclassical models have been replaced by contractual and coalition schools.

George Hendrikse and Cees Veerman analyse control rights and frequency of board meetings and how these two aspects influence members' willingness to invest in the co-operative. Agricultural co-operatives must adapt to new market conditions, which means that the relationship with the members, as well as the management, must change.

Except for the above-mentioned papers, the book includes E. van Heck, "Innovative Electronic Reverse Auction in Demand Chains: Prototype and Experiments in the Fruit Industry"; and B. Krug, "Commons, Collectives and Corporations. The Development and Change in China's Rural Sector".

In conclusion, this is an interesting book containing well-written articles especially for those interested in agricultural co-operatives.

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