

Invited Paper

Inertia in Cooperative Remodeling

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Which organization model is appropriate for a cooperative enterprise depends on the prerequisites in its business environment. When conditions are changing, the firm must adapt itself. The entry of Sweden, Finland, and Austria into the European Union led to radical changes for agricultural cooperation, especially for Swedish cooperatives since agricultural policy was not allowed a transitional period. After two years, Swedish cooperatives have still not adapted their organization model despite poor agricultural profitability. The hindering factors are conservatism among members and difficult institutional conditions with regard to legislation and public opinion.

Determinants of Cooperative Models

The concept of cooperative organization is far from homogeneous. There are many forms of cooperative organization, and there are decisive differences in how they are organized and how they work (Barton 1989; Van Dijk 1996; Ollila and Nilsson 1997)—ranging from the new generation model in the Midwest (Egerstrom 1994; Cook 1997) to socially involved and government-supported cooperation in the Mediterranean zone (Chomel and Vienny 1996; Marini and Zevi 1996; Monzón 1996). Between these extremes are found, for example, the traditional cooperative model, with roots in the Rochdale pioneers society, and the proportional model originating from Emelianoff (1942), Robotka (1947) and Phillips (1953). In addition, there exist models that have properties inherited from different national cooperative pioneers, such as Raiffeisen and Schultze-Delitzsch.

The difference between cooperative models is, fundamentally, how the relationships between the society and its members are formed—ultimately this is a question involving rules governing ownership. These relationships can contain a widely varying set of rights and obligations that determines how the cooperative functions for the members and acts in relation to sales markets, capital markets, authorities, and other interested parties.

Sometimes it is asserted that one specific cooperative model is superior to others, but it is difficult to accept such statements since conditions in business environments may differ widely. The contingency approach of organization theory offers a better solution (Lawrence and Lorsch 1969; Kast and Rosenzweig 1979): Which model is the best for a cooperative depends on its economic, political/legal, and social conditions. As is the case with all organizations, a cooperative must reflect its environment. However, there may be a problem if different parts of the environment place contrasting demands on the cooperative, which would make it impossible to achieve the fit required by the contingency theory.

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Economic factors

When cooperatives market the products of their members at a given market price, and when they have large economies of scale in their activities, there are strong economic arguments for the traditional cooperative model. The continuously downward sloping average cost curve results in members getting greater profits for larger volume. It is frequently asserted that cooperatives traditionally have volume maximization as their goal. To achieve volume increases, a number of organizational measures can be used, for example:

- The fact that cooperative firms are organized in the form of societies means that it is easy to include new members and thus suppliers. This is strengthened as a result of the societies being open.
- Existing members can increase their deliveries, and new members can be recruited if the cooperative offers high prices for raw products. This can be achieved by paying low, or even zero, interest on member shares and as a result of the society working with unallocated capital that does not demand any return.
- In the traditional cooperative model there are often subsidies between different member categories. When freight is paid by the society, the well-located members are supporting those who are poorly located. Low entry fees imply that older members assist younger people in joining the society. Thus, supplies will be obtained from farmers that otherwise would be unable to produce profitably.
- The burden that delivery obligations imply can be tolerated by a member if he or she knows that the volume will then increase so that the average cost will decrease.
- New members can more easily be recruited if they experience a low risk associated with joining the society. Contributory factors in this respect are the equality principle and the principle of one member—one vote. The existing members offer these benefits in order to reap economies of scale in the cooperative's production.
- Surplus capacity in production plants is commonly found, which finds expression in the fact that the societies want to expand. Frequently the activities are concentrated to one single raw product, which can be handled on a correspondingly larger scale.
- To recruit and retain members, use is often made of ideological arguments, such as solidarity, fairness, and even altruism.

If the average cost curve and the price curve run parallel to each other, then no profits can be made by increasing the volume. One explanation might be that the cost curve has leveled out, another that the price is no longer a given market price but decreases with the firm's volume, i.e., the firm has become dominating in its old market or has entered new sub-markets where it is dominating.

In this situation, the society has reason to lower its cost level by eliminating the production-stimulating elements in the traditional cooperative model since, when considered in isolation, they probably inhibit efficiency. The well-located member should not pay haulage costs for those who are poorly located; new members should not be allowed cheap entry into the society; the raw product price should correspond to the product's sales value. Service at cost will thus be a leading principle in the relations between the society and its members, as well as between

the members (Knutson 1985; Cotterill 1987; Royer 1992; Parnell 1995). The society becomes individualized and the ideological motives fall into the shadows. This is where the proportional cooperative model evolves.

If a cooperative has an average cost curve at a minimum level, there is no reason for it to either increase or decrease its production volume. Here, the preferred approach is a closed membership organization with delivery contracts and other properties from the proportional model. With negotiable member rights, the society is also assured that its membership will consist of the most efficient farmers. If this concerns value-added products, this might very well be a new generation cooperative model.

Political factors

Another factor that cooperative organizations must adapt themselves to is legislation. In Europe there are four different kinds of cooperative legislation (Hofkens 1995).

The most liberal kinds are in Denmark, Norway, Ireland, and the United Kingdom where, in principle, there is *no cooperative legislation*, which means that cooperatives can design their activities extremely freely. In the Netherlands there is a *law on cooperative associations*, which implies that cooperatives can be innovative in financing, business activities, organizational structure, etc. *Laws on cooperative societies* are found in several countries like Germany, Belgium, Sweden, and Finland where there are comprehensive regulations on financial conditions, membership control, accounting and auditing, etc. Finally, most Mediterranean countries have *legislation on cooperatives with a social role*. Here cooperatives are expected to contribute to various social areas like regional development, democratic development, and control of unemployment.

Legislation on cooperative societies, naturally, is of great importance for cooperative organization models, but generally these laws are subordinate to economic conditions. Nonetheless, it is difficult to understand the south-European cooperative movement from an economic perspective—it demands a wider social perspective.

Agricultural policy also appears to be ranked higher than cooperative legislation as a reason cooperatives adopt a certain organizational model. This is understandable since the policy establishes the economic conditions for the cooperatives. Agricultural policy determines what the term efficiency implies—depending on the type of agricultural policy, skillful lobbying may be more profitable than economic rationality. Despite agricultural cooperative sectors in Denmark and Norway having similar laws on cooperatives, they are vastly different due to the differences in agricultural policy. The Danish are export-aligned, market-oriented, and progressive (Søgaard 1994), whereas the Norwegians are aligned toward the domestic market, politicized, and bound by tradition.

Social factors

Naturally, the way a cooperative is organized depends also on the views of its members. One may expect that members organize their cooperative in such a way that it corresponds to the economic and legal conditions. Given these conditions, the members will attempt, through their cooperative, to reduce certain types of transaction costs found on the markets (Bonus 1986; Nilsson 1994). However, problems may arise if there are differing opinions among the members—if different member categories have conflicting views or if the members want the cooperative to solve conflicting problems.

Aim of the Paper

Using the above discussion as starting point, one may wonder what happens in an agricultural cooperative sector when conditions change rapidly and drastically. Can the prevailing cooperative model be replaced with another that better corresponds to the new economic conditions? This paper explores this question.

The situation described above occurred when the European Union widened its membership in early 1995 to include Sweden, Finland, and Austria. In each of the three countries, there was a national agricultural policy that resulted in the agricultural cooperatives working according to a traditional cooperative model. Overnight, the agricultural policy of the European Union was introduced, giving completely different market conditions—and demanding a different cooperative model.

There were, however, differences between the three countries. Finland and Austria negotiated a five-year transitional period during which national support was permitted but with a successive reduction. Sweden did not experience such a transitional period, so here there was a massive change of system from one day to the next. No study has yet been made of how Swedish agriculture has been affected by the membership. Preliminary studies in Finland indicate that massive changes have taken place, for example, a drop in turnover of 22 percent for one cooperative slaughterhouse (Aaltonen 1996).

The Swedish Agricultural Cooperative Model

The modern history of Swedish agricultural cooperation started in 1850. The first societies were modeled on the German approach and were, thus, of the Raiffeisen type (Böök and Johansson 1988). During the first decades, Swedish agricultural cooperation was successful in the same way as, for example, that of the Danish. The societies were market oriented; expansion was stable; exporting was successful (Utterström 1980). However, following the depression, there was strong politicization in the 1930s. Agriculture was given state support to maintain food supplies, and the cooperative societies got an important role in administering agricultural policy.

Agricultural policy gradually became increasingly comprehensive (Micheletti 1990). In principle, all branches of production became regulated. The state guaranteed minimum prices; production quotas were introduced in certain industries; the societies were given monopoly rights within defined regions; the state financed the losses in exports, etc. As the government wanted a strong negotiation partner, centralization of agricultural cooperation was encouraged. The country-wide federation of agricultural cooperatives became very powerful with respect to policy and over regional and local societies. This has contributed to a homogenization that remains—all societies within one industry work in almost the same way, and there are great similarities between cooperatives in different industries.

As the decades passed, the costs of agricultural policy became gigantic—these costs took the form of state subsidies and inefficient agriculture. Criticism of this waste became so strong that, in 1990, Parliament decided to abolish the entire agricultural policy. Sweden would be the only country in the world, apart from New Zealand, with a completely deregulated agricultural system. A successive deregulation was to take place over a period of five years, after which all product prices would be on the world market level. A large proportion of Swedish agriculture would probably have been eradicated.

Shortly afterward, discussions on Sweden's membership in the European Union started. Following a referendum, Sweden became a member state on January 1,

1995. In connection with the government's membership application, work on the deregulation of agricultural policy was stopped. It was considered unsuitable to first move toward increased deregulation if Sweden was to be subsequently governed by the European Union's agricultural policy. Thus, deregulation was completed to less than half the extent originally planned.

At the time of both the decision on deregulation and entry into the Union, agricultural cooperation was organized according to a traditional cooperative model. Sales prices were relatively stable. The businesses of the societies were focused on volume and large-scale production. Unallocated capital was strongly dominating. There were considerable subsidies, mainly flowing from effective farmers to less effective ones. Members were given no interest on their allocated capital. Product prices to farmers were not differentiated to any great extent. Ideological conceptions about solidarity and equality were more important decision criteria than profitability arguments. The domestic market was regarded as uniform instead of segmented, and market adaptation was poor. There was no competition between the Swedish cooperatives, and the state prevented large volumes of imported products. Exports consisted of state-subsidized marketing of bulk products.

Table 1 illustrates key data in Swedish agricultural cooperation. The question is now whether these cooperatives can adapt themselves to international competition, where the competitors have more favorable production conditions and long

TABLE 1. Statistics on Agricultural Cooperatives in Sweden, 1994 (Various sources) (1 SEK = 0.15 USD)

Industry	Number of Primary Cooperatives	Turnover Total <i>bill. SEK</i>	Turnover Largest Cooperative <i>bill. SEK</i>	Turnover Smallest Cooperative <i>bill. SEK</i>	Number of Members <i>thousand</i>	Market Share <i>percent</i>
grain and supplies	13	27	5	0.3	72	
grain						70
fodder						79
fertilizers						79
pesticides						65
seeds						68
dairy	8	27	11	0.01	19	99
slaughter houses	5	16	7	0.7	60	
pork						79
meat						74
poultry						49
forestry	8	11	6	0.2	87	50
seed and ripe	18	0.9	-	-	24	100
starch	1	0.7	-	-	2	100
eggs	1	0.5	-	-	0.4	44
animal breeding	22	0.4	0.1	0.01	31	100
sugar beets	5	0.4	-	-	5	100
vegetables	14	0.1	-	-	1	40
fur animals	1	0.1	-	-	0.4	100
potatoes	25	0.006	-	-	2	-
agricultural credit	10	-	-	-	-	-
Σ	131	84	-	-	304	-

experience in international activities. In the new market situation there is reason to think in terms of market adaptation and efficiency at all levels. What is now required is a transition of the cooperative model, toward strong features of proportionality and service at cost.

Efficiency-Raising Measures

To convert a regulated and production-oriented sector to a competition-exposed and market-oriented agriculture, cost reductions and improved marketing skills are required. When prices were established in negotiations with the state, there were weak incentives for rational production. To the extent that societies did not sell to the state they had a protected position on their regional markets. Now, when price levels are determined by imports from other European Union countries, prices have fallen by up to one-fourth, mainly for meat but also for many dairy products. Farmers, however, have had some compensation by direct support from the Union's agricultural policy. The grain industry is less affected, not least because of massive economic support from the European Union.

During recent years, there have been considerable efficiency-raising measures, but these have been insufficient and have not been similar in all parts of the production chain. Cost reductions have been made primarily in agricultural cooperatives' operations. Numerous plants have been closed, and more than one-third of the employees have been dismissed despite an almost unaltered production volume. During the days of national policy, one could afford to have a very fine-meshed production structure. The plants were only a fraction of the size of those in Denmark, that today are the main competitors. However, the Swedish societies can never reach the Danish level of processing costs, and thereby, ultimately, of profitability, due to disadvantages of geography and too-small production volumes.

Costs of primary production have not been lowered as much as costs of processing. Farmers have not accepted these efficiency-raising measures among themselves, but today a structural measure to increase efficiency is on its way. There is a strong trend toward larger and fewer farms. Today, most animal producers (including those involved in milk production) are not profitable since their societies have been unable to pay prices that are noticeably higher than what corresponding products cost on the international market.

As a result of European Union (EU) support programs, however, it is not certain that those farmers who are still in business are the most efficient ones. These support programs are distorting market mechanisms. In many cases, inefficient farmers can survive with money from Brussels, while, in some cases, fairly efficient farmers might have to stop their operations as they can not manage the competition with the strongly supported farmers.

To some extent, the efficiency increase experienced by cooperative societies has been achieved by mergers. This development has now reached the point where the Competition Board does not allow the largest societies to merge any longer, even if these are generally smaller than their foremost European competitors. During recent years, the Swedish agricultural cooperatives have established a large number of ventures, mainly with other European cooperatives.

Marketing

Major efforts have been made on the marketing side, but, so far, the effects have not been sufficient (Hendriks and van de Klundert 1995). Marketing skills

of traditionally production-oriented agricultural cooperatives are weaker than among foreign competitors. This is illustrated by the flow of products over borders. The Swedish cooperatives' export volumes are quite insignificant. At the same time imports, primarily from Denmark, the Netherlands, and Ireland, have increased strongly. These countries are able to have profitable sales at prices that hardly cover Swedish production costs.

Swedish producers try to overcome their cost handicap by marketing high-quality products, particularly profiled as ethical products, hoping to reach less price-sensitive consumers. Regarding animal welfare and ecological production, Swedish production is probably among the best in the world, though the costs are very high. On the domestic market, this ethical concept has been of some success, but since the concept is applied to the entire market it is impossible to get sufficiently high prices. The ethically oriented market segment may buy at the same low prices as the rest of the market, and the market price level is set by the imported products, produced at low costs. No Swedish production is adapted to the price-sensitive market segments.

The decision to produce and market all Swedish products ethically (with considerations for ecology and animal welfare) was not based on market considerations. This represents a legal demand that the federation of Swedish agricultural cooperatives has decided to promote.

The price disadvantage becomes even clearer when Swedish cooperatives sell on international markets. The sales arguments are the same, that is, ethical. A limited degree of success has been achieved, e.g., among Belgian and British grocery chains with high-quality profiles. This, however, is hardly a profitable business for Swedish cooperatives.

A New Cooperative Model?

Members

Following the change of system in agriculture, many farmers have started to think along new lines, but among most of them no radical change has occurred. Realization that market forces now prevail has not penetrated to all. Instead, most farmers continue to believe that somebody else will solve their problems. Agricultural policy—mainly the old national policy but also the European Union policy—appears to create a paralyzed mentality. Traditional cooperative values dominate among farmers: for example, values relating to fairness and solidarity are lodestars for cooperative enterprises. A more business-like attitude is found largely among the younger farmers (Hakelius 1996).

During the days of national agricultural policy, the cooperatives were built up according to a traditional model with, e.g., subsidies between different membership categories. Despite the cooperative societies today being in competition with all other food producers in the European Union, they have retained these subsidies. Well-located farmers subsidize those that are less well located when the transport costs are paid by the society. Older farmers subsidize younger farmers as a result of the system for member investments in the societies. Efficient farmers subsidize less efficient farmers on account of limited price differentiation.

Despite competition today between all food producers in the European Union, many still hold the opinion that the societies should operate within specific regions. If a wholesaler within one society's region buys from another society, there may be demonstrations and letters to the newspapers. Voices asserting that prod-

uct prices should be determined by production costs and not by the market value of the products are still being heard.

The numerous decisions to close unnecessary production plants have often been achieved without complaint, but there are also examples where the farmers have protested against, for example, a slaughter-house being closed in their neighborhood. Local patriotism and tradition are often stronger arguments than cost-savings and, thus, product prices. The boards and managers are, of course, aware of the fact that members reason in non-economic terms and, so, they risk waiting too long before reaching decisions on structural rationalizations.

The traditional viewpoints among members are passed on to the boards and managers. That the leaders have good knowledge of what the market requires is well documented, but they cannot neglect the opinions among their memberships. So far, there have not been any major replacements of boards or directors as a result of the change of system; none of the societies have rules governing the maximum time directors may retain their appointments.

Legislation demands that all societies adhere to the principle of one member—one vote. Since most societies have a strong majority of small, elderly, or part-time farmers, this favors resistance to change. Some groups of farmers have incomes other than from farming and, thus, do not have such strong motives to ensure that the societies are operated with the highest possible efficiency.

Legislation

In general, there is a negative view of agricultural cooperation in Swedish society (Nilsson 1996). One reason is that agricultural policy gave cooperative societies a dominating position, and, even today, they are often spoken of as being monopolistic. Additionally, bad will is generated by the fact that the Swedish cooperative model has such large collective features—cooperation is often regarded as a socialistic form of organization. For example, the societies' equity capital consists of 80 to 90 percent unallocated equity. Further, many academics use agency-theoretical arguments to assert that there is a lack of owner control and ineffective allocation of resources (Vitaliano 1983).

This lack of legitimacy is found both among the general public and among different groups of people in power. The general public believes farmers still have just as good an economy as they had during the days of national agricultural policy. Many politicians are influenced by academics and non-cooperative managers who consider cooperation to be an out-dated and ineffective business form. Since the farmers make up less than 2 percent of the electorate, their political role is very limited. In the cabinet offices there are civil servants who consider that dominance, standardization, and centralization are properties incorporated in cooperative activities. Thus, there are powerful forces working against cooperative businesses.

Most of the legislation that regulates agricultural cooperation today is still influenced by the national agricultural policy. The current law on cooperatives is based on International Cooperative Alliance principles from 1966. When these principles were elaborated they were largely focused on the situation concerning European consumer cooperation, and, so, ideological considerations were allowed to dominate over economic ones. When the Swedish law came into force in 1987 there were no objections from agricultural cooperatives even though it was obvious that efficiency might suffer—the agricultural policy was still there to provide a safety net. Thus, the law places demands on openness, low interest rates on

member investments, equal voting rights, etc.—the traditional cooperative organization model.

In 1996, an official inquiry presented a number of proposals relating to the liberalization of the cooperative legislation. The intention was that it should be possible to conduct effective, market-oriented cooperation. The proposals have been positively received, and it appears probable that, after 1997, the societies will be allowed to pay a good rate of interest on deposits, have closed memberships, negotiable B shares, differential voting rights, possibilities to increase individual ownership, etc.

Another problematic piece of legislation is the Law on Competition. The national agricultural policy gave agricultural cooperatives a dominating position with regional monopolies—and, even today, they dominate the market. This has now led to a law on competition that discriminates against agricultural cooperatives. Its intention is to help non-cooperative competitors gain market strength, while putting up restrictions for the cooperatives. Thus, bargaining cooperatives and federated organizations with production operations are, in principle, prohibited. Delivery obligations are not allowed. When a member resigns, his or her allocated capital must be redeemed very soon. Supply cooperatives and marketing cooperatives are treated equally. There is a government authority with immense power, but where aversion to cooperation is evident.

In 1995, an official inquiry was held into this Law on Competition. The inquiry illustrated that Swedish competition policy relating to cooperation diverges from corresponding legislation in other European countries and that it is in conflict with available theory. One of the experts consulted in this work was Richard Sexton, but his arguments were waved aside as being based on American theory and thus not applicable to Sweden (Sexton 1995). The divergences with other countries were denied. There was, thus, a lack of political will to modify the law on competition. (The author took part as an expert in both this official inquiry and the revision of the cooperative law.)

This lack of understanding of the situation in agriculture regarding international competition is also found in numerous other aspects of policy. In comparison with competing countries, Swedish farmers face high taxation pressure regarding taxation of income, real estate, fuel, pesticides, etc.

The cost level in agriculture is also increased as a result of legislation on animal welfare and ecology, which is more restrictive than in any comparable country. These laws came into force during the agricultural policy period, when high costs could be compensated by the state, but they have remained unaltered. Additionally, politicians, the general public, and civil servants refuse to perceive that higher costs have the effect of reducing competitiveness. In some cases, the ecological and animal welfare measures have led to production costs in Sweden being 10 percent higher than in the neighboring country of Denmark.

The national organization of agricultural cooperatives has attempted to exploit the ecology and animal welfare legislation as a marketing argument directed at interested consumer markets. To give greater impact, the regulations have been widened with internal rules but, naturally, with the result that the production costs have become even higher. Within the federation a special "Swedish concept" has been developed that is marketed as "On the road to the cleanest agriculture in the world," which is sometimes ironically rephrased as "On the road to the most expensive agriculture in the world." All agricultural cooperative societies in Sweden are involved in this project.

Conclusions

There are occasions when cooperative organizations should convert from one cooperative model to another, that is, when changes occur in the economic, political, and social environments. Probably, cooperative failures largely depend on such changes not being introduced or being introduced too late.

Swedish agricultural cooperation is largely organized according to a collectivist, traditional model. This model was appropriate when the strongly protectionist national agricultural policy prevailed, but today European Union policies place other demands. The cooperatives now face international competition where the main competitors are larger firms that have lower costs and can market their products at lower prices. The traditional cooperative form is then seen to be inappropriate. Market adaptation is insufficient when the societies are designed to stimulate production of large volumes. Production is not well adapted to the specific demands of different market segments. The cost and price levels are not competitive when foreign competitors work under more liberal conditions.

The solution would be to transfer to a cooperative model that induces farmers to align themselves toward market requirements and efficiency. It is questionable as to whether subsidies flowing between different member categories are effective, since they lead to a non-optimal structure of primary production. Far-reaching individualization of ownership, market signals, and membership control are required. In other words, the development must proceed toward a proportional cooperative model.

However, strong social and political forces hinder such a remodeling of the agricultural cooperative sector in Sweden. The current law on cooperative societies prevents a conversion to economically rational cooperation, but there are good prospects for an imminent revision of the legislation. A more difficult problem is eliminating the bad will that agricultural cooperation has experienced among many politicians and civil servants. This has led to a law on competition designed to promote non-cooperative competitors, which is the equivalent of weakening the position of the cooperatives. This is taking place at the same time as competition from the rest of Europe is growing strong on the Swedish market.

Nonetheless, the greatest hindrance to change is of a social character. Among the farmers there is strong support for the current traditional form of cooperation—the tradition from former days is strong. The existing cooperative model has given considerable power to a majority of small-scale and part-time farmers, and a large share of the members are elderly—consequently with a weak incentive for renewal. Probably, however, the ongoing structural conversion within agriculture toward larger and fewer farms will result in a shift in mentality whereby, within some years, there will be voices heard urging service at cost, proportionality, market orientation, and cost efficiency as lodestars for agricultural cooperatives.

References

- Aaltonen, Seppo. 1996. Adjustment of the Finnish food industry. In *First experiences of Finland in the CAP*, ed. Lauri Kettunen, 43–56. Helsinki: Agricultural Economic Research Institute.
- Barton, David. 1989. Principles. In *Cooperatives in agriculture*, ed. David W. Cobia, 21–34. Englewood Cliffs, New Jersey: Prentice-Hall.
- Bonus, Holger. 1986. The cooperative association as a business enterprise. A study in the economics of transaction. *Journal of Institutional and Theoretical Economics* 142:310–339.

- Böök, Sven-Åke, and Tore Johansson. 1988. *The co-operative movement in Sweden. Past, present—the future*. Stockholm: The Swedish Society for Co-operative Studies.
- Chomel, André, and Claude Vienny. 1996. The evolution of the principles and rules governing cooperative organizations in France 1945–1992. In *Cooperatives, markets, co-operative principles*, eds. Alberto Zevi, José Luis Monzón Campos, Roger Spear, and Alan Thomas. Liège: CIRIEC.
- Cook, Michael L. 1997. Organizational structure and globalization: The case of user oriented firms. In *Strategies and structures in the agro-food industry*, eds. Jerker Nilsson and Gert van Dijk, 77–93. Assens: van Gorcum.
- Cotterill, Ronald W. 1987. Agricultural cooperatives. A unified theory of pricing, finance and investment. In *Cooperative theory. New approaches*, ACS-USDA Serv. Rep. 18 (July), ed. Jeffrey S. Royer, 171–258. Washington, D.C.: USDA.
- Egerstrom, Lee. 1994. *Make no small plans. A cooperative revival for rural America*. Rochester, Minnesota: Lone Oak Press.
- Emelianoff, Ivan. 1942. *Economic theory of cooperation*. Ann Arbor, Michigan: Edward Bros.
- Hakelius, Karin. 1996. *Cooperative values—Farmer cooperatives in the minds of the farmers*. Uppsala: Department of Economics, Swedish University of Agricultural Sciences.
- Hendriks, Gert-Jan, and Corné van de Klundert. 1995. *Swedish agricultural cooperatives in the European Union*. Uppsala: Department of Economics, Swedish University of Agricultural Sciences.
- Hofkens, Frans, Belgian Federation of Farmer Cooperatives. 1995. Personal communication on February 10.
- Kast, Fremont E., and James Rosenzweig. 1979. Relevance of contingency views to organization theory. In *Contingency views of organization and environment*, eds. Fremont E. Kast and James Rosenzweig. Chicago: Science Research Associates.
- Knutson, Ronald. 1995. Cooperative principles and practices: Future needs. In *Farmer cooperatives for the future*, eds. Lee F. Schrader and William D. Dobson, 34–41. Lafayette, Indiana: Purdue University.
- Lawrence, Paul R., and Jay W. Lorsch. 1969. *Developing organizations: Diagnosis and action*. Reading, Massachusetts: Addison-Wesley.
- Marini, Marco, and Alberto Zevi. 1996. Cooperative principles and the Italian cooperative movement. In *Cooperatives, markets, co-operative principles*, eds. Alberto Zevi, José Luis Monzón Campos, Roger Spear, and Alan Thomas, 108–131. Liège: CIRIEC.
- Micheletti, Michelle. 1990. *The Swedish farmers' movement and government agricultural policy*. New York: Praeger.
- Monzón, José Luis. 1996. Cooperative principles and cooperative reality in Spain. In *Cooperatives, markets, co-operative principles*, eds. Alberto Zevi, José Luis Monzón Campos, Roger Spear, and Alan Thomas, 210–215. Liège: CIRIEC.
- Nilsson, Jerker. 1994. Marketing strategies of cooperatives. In *International handbook of co-operative organizations*, ed. Eberhard Dülfer and Juhani Laurinkari, 596–602. Göttingen: Vandenhoeck & Ruprecht.
- . 1996. The cooperative's most precious asset: Member involvement. In *Seizing power—The international market power of cooperatives*, eds. Lee Egerstrom, Pieter Bos, and Gert van Dijk, 99–122. Rochester, Minnesota: Lone Oak Press.
- Ollila, Petri, and Jerker Nilsson. 1997. The position of agricultural cooperatives in the changing food industry of Europe. In *Strategies and structures in the agro-food industry*, eds. Jerker Nilsson and Gert van Dijk, 131–148. Assens: van Gorcum.
- Parnell, Edgar. 1995. *Reinventing the co-operative. Enterprises for the 21st century*. Oxford: Plunkett Foundation.
- Phillips, Richard. 1953. Economic nature of the cooperative association. *Journal of Farm Economics* 35:74–87.
- Robotka, Frank. 1947. A theory of cooperation. *Journal of Farm Economics* 29:94–114.
- Royer, Jeffrey S. 1992. Cooperative principles and equity financing. A critical discussion. *Journal of Agricultural Cooperation* 7:79–98.

- Sexton, Richard J. 1995. Analysis and evaluation of competition policies affecting agricultural cooperatives. In *Jordbruk och konkurrens—jordbrukets ställning i svensk och europeisk konkurrensrätt*, 389–427. Stockholm: Norstedts.
- Søgaard, Villy. 1994. *Farmers, cooperatives, new food products*. MAPP report no. 5. Aarhus: Aarhus School of Business, Department of Marketing.
- Utterström, Carl. 1980. *Organizational visions, ideologies and the cooperative myth. A study of mergers among farmer cooperatives in Sweden*. Uppsala: Department of Economics, Swedish University of Agricultural Sciences.
- Van Dijk, Gert. 1996. The changing theoretical perspective of cooperatives and markets. In *Seizing power—The international market power of cooperatives*, eds. Lee Egerstrom, Pieter Bos and Gert van Dijk, 171–186. Rochester, Minnesota: Lone Oak Press.
- Vitaliano, Peter. 1983. Cooperative enterprise. An alternative conceptual basis for analyzing a complex institution. *American Journal of Agricultural Economics* 65:1078–1083.