Designing Membership Structures for Large Agricultural Cooperatives
Abstract

**Designing Membership Structures**
**For Large Agricultural Cooperatives**

Gillian Butler  
*University Center for Cooperatives*  
*University of Wisconsin*  
*Madison, Wisconsin 53703*

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This study develops strategies that large agricultural cooperatives can use to improve their membership structures. Design principles from organizational theory are adapted to apply to the membership structures of cooperatives. Eight case studies of agricultural cooperatives illustrate the membership structures of diverse types of agricultural cooperatives. The study concludes that case cooperatives who have implemented strategies consistent with organizational design principles provide effective mechanisms for member control.

**Key Words:** Cooperatives, member control, organization design, membership structures.

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This research seeks to develop strategies that growing agricultural cooperatives can use to improve their membership structures.

Tools employed to achieve this objective are organizational design principles and case studies. Organizational design principles, once adapted for application to membership structures, provide useful frames of reference for thinking about cooperative structures. Case studies supply information about the experiences of some growing agricultural cooperatives. Combined, these tools suggest strategies that cooperative boards and managers may find helpful when considering how to provide opportunities for members to express their opinions and participate in cooperative governance.

Information about the eight agricultural cooperatives used as cases in this research was gathered in two ways. First, cooperative board chairmen and managerial personnel were interviewed using a structured series of questions. Second, cooperative documents provided additional information about each of the cooperatives.

Each of the case cooperatives has experienced growth and change in the past two decades. These cooperatives vary widely in characteristics of their operations and their membership. Both supply and marketing cooperatives are represented. Some cooperatives serve a small geographical area while others serve a very large area. Some deal in few products or services, while some deal in many. Hopefully, board members and managers of many kinds of agricultural cooperatives will be able to find something among these varied cases that speaks to their own unique experience.
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As agricultural cooperatives have grown over the years, they have developed increasingly complex organizational structures. To adapt to increasingly diverse, complex, and unstable conditions in the agricultural economy, they have added vertical levels of authority, divided their work among numerous departments, employed specialists, decentralized decisionmaking, and standardized reports and procedures.

Membership structures have evolved more slowly. The most common structural changes are specializing the board’s work into functional committees and adopting an executive committee with the ability to act more quickly and frequently than the full board. In some cases, vertical levels of representation have been added: elected delegates or executive committees have been added to attend to some decisionmaking tasks. Other cooperatives have divided their membership into units for the purposes of voting, thus improving the representation of a diverse membership.

Among the eight cooperatives examined in this report, when the membership structure has remained simple while the cooperative has grown, there has been member discontent or an expressed need by management for an increased inflow of information from the membership. In some relatively large cooperatives, however, well-developed membership structures provide multiple mechanisms for member control.

Yet, no single membership structure is appropriate for all agricultural cooperatives. Cooperative memberships vary in numbers, dispersion, size of farm operations, types of farm operations, and other features. Operations of an agricultural cooperative may involve the sale of a single product or service, or operations may be diverse. The environment of the cooperative may be stable, enabling many activities to be standardized by rules and procedures, or it may be unstable, requiring new decisions impossible to foresee. Similarly, the cooperative’s operations may be simple and easily understood, or complex, requiring specialized personnel. These factors need to be taken into account when designing structures to improve member control of cooperatives.
Combining recommendations from organizational design theory with the experiences of eight agricultural cooperatives, the study concludes with suggestions and strategies for designing effective membership structures. They include the following:

1. Effective design of membership structures depends on reliable information about who the members are. This may be gathered as part of the procedure for joining the cooperative, through a computerized system or through member surveys.

2. Membership structures should grow and change in response to growth and change in the cooperative enterprise and in its external environment. Membership structures should be periodically evaluated and restructured to reflect changing conditions.

3. The membership should be divided for voting into units that reflect meaningful differences in the needs of members. Although geographic districts are most commonly used for voting purposes, this division may not provide for the most meaningful representation of member interests.

4. When the cooperative’s operations are technologically complex or highly diverse, specialized committees may maximize the effectiveness of member contributions to cooperative governance.

5. When the cooperative’s operations are complex, adding additional levels of representation (such as a delegate body) to the member structure increases the number of opportunities for members to participate in cooperative governance.

6. Decentralizing oversight of some ongoing operations of the cooperative to member committees and delegate systems can free the board to focus on crucial strategic and policy decisions.

7. Member input in rapidly changing environments can be improved through the use of specialized ad hoc committees, survey panels, and hearings.

8. Flows of member input can be effectively channeled to decision points within the cooperative by the use of formal member structures that provide for interaction between member leaders and midlevel managers.
Designing Membership Structures For Large Agricultural Cooperatives

Gillian Butler
Research Specialist
University Center for Cooperatives
University of Wisconsin-Extension

INTRODUCTION

Over the past few decades, many agricultural cooperatives have grown rapidly. Facing increasingly concentrated agricultural markets, agricultural cooperatives expanded their operations to meet the needs of their producer members efficiently and competitively.

Cooperatives have grown by many different methods—through merger, acquisition, diversification, and vertical integration. This growth has not only increased the size of agricultural cooperatives, but has changed the nature of their operations. Many agricultural cooperatives have changed from small organizations providing simple services for a handful of local members into complex enterprises with multiple lines of business and thousands of members scattered over wide areas. Instead of operating in stable and predictable traditional markets, cooperatives compete in dynamic, highly competitive markets where the ability to respond and adapt quickly is critical to business success.

These changes make it increasingly difficult for agricultural cooperatives to ensure democratic member control of the cooperative business. It is more difficult to provide for meaningful member participation in large cooperatives than in small ones. As cooperative businesses become more complex, professional managers and specialists make many decisions once made by the board of directors. As cooperatives diversify their product lines, members may disagree about a cooperative’s priorities. And as agricultural cooperatives enter rapidly changing markets, the ability of a democratic organization to act quickly comes into question. Because of these changes, improved membership structures are needed to ensure that cooperatives remain responsive to their members.

CHALLENGES TO MEMBER CONTROL

Size

Size is the factor most often blamed for dwindling member control of farmer cooperatives. In a small local cooperative, people are likely to know each other. A high level of interaction and communication exists among cooperative members and management. As the cooperative grows, it becomes bureaucratic. People lose the sense of “belonging” to the cooperative and become alienated. Participation in the cooperative decreases, and member control may dwindle.

However, recent research on cooperative member control has failed to support the belief that cooperative size alone undermines member control. One cooperative researcher’ carefully reviewed five studies that examined the relationship between member control and the size of agricultural cooperatives. She concluded that these studies “do not support the hypothesis that increased size means less member control of cooperatives.” Careful design of membership structures may help to overcome the negative consequences of size for member control.

Although size alone does not preclude effective member control of agricultural cooperatives, factors often associated with size may have crucial effects on the effectiveness of a cooperative’s membership structures.

Increasingly Diverse Farmer Clientele

As agricultural cooperatives have changed over the last two decades, so have their farmer members. Many changes in the farm population are continuations of trends that began in the 1930’s, such as specialization in farming and the emergence of a “dual structure” in agriculture. A new trend affecting the farm population is the increasing number of part-time farmers.

Farmers continue to specialize. For example, some western cattle operations have specialized into feeder production and feedlot operations. As a result, there is often no single “farmer position” on issues affecting agriculture in general. There are often conflicting economic interests even among producers of a single commodity. This diversity of farmer interests makes it harder for agricultural cooperatives to determine what is best for their members as a group.

The varying demands for goods and services of member farmers with different farm enterprises have often caused cooperatives to diversify their product lines in attempts to better serve their diverse membership. Diversification of product lines has sometimes produced conflicts among members over such things as priorities for investing cooperative capital and how to allocate overhead costs among members.

The trend toward fewer and larger farms has continued in recent years, fueled by low product prices, high interest rates, and a strong dollar that has limited export markets. Faced with these conditions, farmers have either increased production to increase gross income or turned to off-farm employment to supplement farm income. As medium-sized farmers follow one or the other of these strategies, two subgroups with very different needs emerging from the farm population are the part-time farmers and the large-scale commercial farmers. The increase in numbers of part-time farmers has been particularly dramatic in recent years. In 1974, there were about five full-time farmers for every three part-timers. By 1978, the ratio was almost 1 to 1.

The interests of large farmers and small or part-time farmers may diverge. For instance, quantity discounts offered to large farmers to retain their business may strike small farmers as unfair and inconsistent with cooperative principles. On the other hand, part-time farmers may need the cooperative to be open on weekend or evening hours, which full-time farmers may consider an unnecessary expense.

Increasingly Unstable Agricultural Environment

The agricultural environment keeps changing at an increasingly rapid rate. Causes of instability in the agricultural sector include: the declining role of the farm level in the food system, the internationalization of agricultural markets, and the destabilization of the Federal agricultural policymaking process.

Today the farm sector is only a small part of the total food system. Studies have shown that at least 80 percent of the food system’s contributions to the gross national product (GNP) is from nonfarm sectors. As input production, output processing, and marketing activities have moved off the farm, producers have increasingly been at the mercy of events in both input and output markets. The effects of the oil crisis on agriculture illustrated the destabilization that results from being but a modest part of an interdependent food production system.

Likewise, the internationalization of agricultural markets has had dramatic effects on U.S. agriculture. The U.S. farmer is increasingly dependent on international markets to maintain domestic price levels in an era of surplus production. The price effects of poor world wheat harvests in the early seventies and of declining exports due to a strong dollar in the eighties illustrate the destabilizing effects of international markets on the U.S. agriculture.

In the 1960’s and the 1970’s, new participants entered the national agricultural policymaking process. Labor, consumer, and welfare groups transformed agricultural policy into food policy. As a result, policy outcomes have become extremely uncertain. Moreover, agricultural policy, once legislated every 5 years, is now being rewritten yearly.

A rapidly changing and unpredictable environment presents a challenge to democratic governance of any sort. It takes time to inform people, time to organize meetings, and time to reach agreement. A cooperative in a rapidly changing environment may not be able to react quickly and effectively to a rapidly changing environment if member control mechanisms are slow and clumsy. On the other hand, if management is given sole authority to make timely decisions, the cooperative may drift in directions neither intended nor approved by the membership.
Increasing Complexity of Agricultural Cooperatives

Just as the agricultural environment has become more turbulent in recent decades, it has also become more complex. One factor contributing to the complexity facing agricultural cooperatives is vertical integration.

Vertical integration is the extension of a business to different stages of production or distribution. Vertical integration may be backward into manufacturing or ownership of primary resources (such as oil wells or phosphate mines) or forward into processing, transportation, or retailing. Some of the larger agricultural cooperatives have employed this growth strategy and extended operation vertically. The vertically integrated cooperative often faces highly competitive markets dominated by very large firms. High levels of management expertise are required for success in these markets. Additionally, vertical integration enters the enterprise into multiple markets. Essentially, management must be able to control two or more types of businesses within one firm.

As cooperatives enter new areas such as processing, product development, and manufacturing, the ability of member representatives to make informed judgments about cooperative business decisions becomes strained. It is difficult for a part-time board of farmer-members to monitor and provide oversight to complex business decisions requiring careful consideration of large amounts of information. Few farmers, busy managing their own farm operations, have the time.

As the cooperative business grows more complex, the cooperative is likely to hire specialists. Decisions affecting members may be delegated by the general manager to these specialists in the organization. The board, dealing only with the general manager, may not have input into many potentially significant and long-term decisions. Indeed, they might not even be aware that decisions with long-term consequences are being made.

INCREASING MEMBER CONTROL

Cooperative activists have long been aware of the problems of maintaining an active and involved membership as the cooperative business becomes large and complex. Many cooperatives have adopted member relations and communications programs in an effort to increase member participation. These programs are important and necessary to ensure member involvement.

A second way to increase member control of growing cooperatives is to redesign membership structures.

Cooperatives are uniquely different from investor-owned firms because of their democratic membership structures. These structures enable cooperatives to respond to the needs of their customer (members) more effectively than traditional firms. The dissatisfied customer of an investor-owned firm can only “vote with his feet” to express discontent, that is, take his business elsewhere. A cooperative, member/customer in contrast, has additional means to express opinions, such as voting for directors and attending cooperative meetings. While “voting with the feet” expresses dissatisfaction with a business, it provides very little information about the nature of customers’ complaints or the alternative products or services customers desire. A cooperative’s membership structure, however, enables cooperative member/customers to provide much richer information to guide the cooperative in responding to member needs.

The Organization as an Information Processing Tool

Some organization theorists find it useful to think of an organization as a tool for processing information. This model provides a guide to designing cooperatives in a way that takes advantage of the opportunities for “voice,” for rich information inputs, inherent in the membership feature of cooperative organization.

Information about desired outcomes, or preferences, and cause/effect relationships is necessary to make effective organizational decisions. A group can act together as an organization only if they know what they want and how it can be achieved. If either of these is unknown, the organization is faced with uncertainty.

In a cooperative, the membership structure is a source of information about member goals and preferences. Cooperative management is hired by the members to provide the technical information necessary to reach member goals. The cooperative’s organizational structure is a vehicle for bringing these two kinds of information together so the organization can make effective decisions.

By changing cooperative organizational structure, we can, in effect, redesign the cooperative so that it is a more efficient tool for bringing together the information necessary for good decisionmaking.
Dimensions of Organizational Structure

Traditionally, organizational structure is depicted with an organizational chart, such as in figure 1. The vertical levels represent the hierarchy of decisionmaking authority within the organization. The horizontal divisions in the chart show how work is divided into various departments and the different types of jobs.

Organizational theorists use a chart to identify various dimensions of organizations. These dimensions permit description of the traits of specific organizations and comparison of organizations. The following describes dimensions of organizations that come from organizational charts:

1. Organization size. Two common ways to measure size are number of employees and sales volume.

2. Number of vertical levels. These represent the chain of command. For example, the organization represented in figure 1 has three vertical levels.

3. Number of horizontal divisions. These are the major subunits that the work is divided among. They are measured by counting the number of departments that report to the general manager. The organization in figure 1 has four horizontal divisions.

4. Basis of horizontal division. The major subunits may represent markets, clients, products, or functions (marketing, finance, etc.). The basis of horizontal division in figure 1 is mostly by product line.

5. Specialization. When work is specialized, each employee attends to only a narrow range of tasks. Specialization can be measured by counting the number of different job titles in an organization. The level of specialization in figure 1 is 11.

6. Supervisor/staff ratio. This is the total number of supervisors divided by the total number of nonsupervisory personnel in an organization. The ratio indicates the administrative intensity of the organization.

In addition, several others are not revealed by an organization chart, but can be determined by examining records or interviewing personnel. Among these are:

7. Standardization. The level of standardization is high when many reports, meetings, or procedures recur in a similar way across departments.

8. Centralization of decisionmaking. Decisionmaking is highly centralized when a few people at the top have most of the authority. Conversely, decisionmaking is decentralized when the authority is delegated to personnel at lower levels of the organization.

Dimensions of Membership Structure

A traditional organization chart is a useful tool to describe part of a cooperative; however, it does not include members as part of the organization. Cooperatives have operations and membership structures.

The operations structure of a cooperative does the actual day-to-day work. It is composed of the management and employees, and is often represented by a traditional organization chart.

Membership structure, usually discussed only in terms of voting rules and terms of office, can be viewed freshly from the perspective of organizational theorists. An organization chart, similar to one for operations, can be developed (figure 2). It features vertical levels, horizontal divisions, and specialized roles.

Specific traits can be identified so cooperatives can be compared. Among them are:

1. Membership size.

2. Vertical levels. Membership, as well as operations, structure may have several levels in the chain of command. For example, figure 2 shows two vertical levels-members elect delegates who in turn elect the board of directors.

3. Horizontal divisions. Figure 2 shows four horizontal division (member districts).

4. Representation. The basis may be geographical (figure 2), or by type of crop, size of farm, and so on.

5. Specialization. The level of specialization is determined by the number of different formal roles members have in governance (seven in figure 2).

6. Representative/member ratio. This is the total number of members divided by the total number of elected representatives.

7. Standardization. Just as the operations bureaucracy of the cooperative may adopt routine rules and procedures to
Figure 1
Structure of a Hypothetical Organization

General Manager

Admin. Division Manager
Bookkeepers

Petroleum Division Manager

Feed Division Manager

Crop Prod. Division Manager

Local Crop Prod. Spc.

Local Feed spc.

Local Station Spc.
Employees

Local Feed spc.
Employees

Local Station Spc.
Employees

Dairy Service Salesman

Local Feed spc.
Employees

Local Crop Prod. spc.
Employees

Local Crop Prod. spc.
Employees
simplify its work, so do member representatives.

8. Centralization of decisionmaking. The level of specialization is determined by the number of representatives making decisions. The fewer the number the more centralized it is.

**Designing Organizational Structures for Uncertain Environments**

Extensive research on organizational design has concluded that there is no “one best way” to structure all businesses. Instead, the best design for a business depends upon how much information it needs. Organizational theorists have identified various conditions that increase uncertainty for an organization. These conditions are important to consider when designing an organization. Three conditions they have identified—diversity, complexity, and instability—pose member control problems for agricultural cooperatives.

A cooperative with a diverse membership needs more information about member preference than cooperatives where members are more alike. A cooperative with a
rapidly changing, unstable environment needs a structure that can process information quickly. And a cooperative in a complex environment needs sophisticated information to cope with technical demands.

A business operating in an uncertain environment will be more successful if it changes its structure to either reduce the amount of information it needs or to increase its ability to process information. Such changes can be made by altering various dimensions of an organization’s structure.

Organizational theorists have identified structural strategies that improve organizational performance when the environment is diverse, complex, or unstable. Although these strategies were devised to apply to operations structures, the principles underlying these strategies can also guide the design of membership structures.

Structural Strategies for Diverse Environments

An organization facing a diverse environment can minimize the amount of information needed by any single group in the organization by identifying like segments of its environment and establishing separate structural units to deal with each. Similar segments of the organization’s environment become the basis for dividing the organization into horizontal sections. The more diverse the organization’s environment, the more separate divisions it should establish, increasing the number of horizontal divisions in the organization’s structure.

The horizontal division strategy can be used by a cooperative with a diverse membership. By identifying like segments of the membership and establishing structural units for each, the range of viewpoints and interests a single representative needs to represent is reduced. Many bases of representation may be appropriate for the membership structure of an agricultural cooperative: geography, size/class of farm operation, type of commodity produced, to name a few. Since the purpose of membership structures is to provide information about member preferences, a base of representation that reflects the different opinions of members on relevant issues is desirable. Cooperatives with diverse members may need more horizontal membership divisions than those with a more uniform membership.

Structural Strategies for Complex Environments

Another source of uncertainty for an organization is complexity. Complexity is the extent to which the organization requires sophisticated technical knowledge to operate efficiently. A cooperative’s environment becomes increasingly complex as it takes on lines of business which its member patrons do not have the skills to manage themselves. Complexity increases as the array of products and services the cooperative supplies becomes further removed from the farming operations of its members. Complexity increases as the marketing options facing the cooperative increase and its efforts must be ever more targeted.

According to organization theory, an organization with increased information needs due to complexity can use three different strategies to manage its information needs. The first increases the capacity of the organization to process information by increasing the number of vertical levels in its hierarchy, adding new roles to handle the information collection and decisionmaking tasks. This strategy often increases the supervisor/staff ratio of the organization. The second strategy open to an organization in a complex environment is specialization. The organization can create jobs that require an individual to cope with only a limited span of problems, and it can hire technical experts with training to solve these specific problems.

Decentralizing decisionmaking is a third strategy for coping with complexity. Since one human brain can process only a limited amount of information, decisionmaking in complex environments should be divided among participants in the organization. Decisionmaking authority should be decentralized to specialists who possess the technical information necessary to a particular decision.

Member structures can use these same strategies to reduce the uncertainty caused by environmental complexity. Adding levels of representation to the membership structure includes more individuals to collect information from the membership and share the decisionmaking tasks. An example is a delegate system.

Specialization can also improve membership structures. As complexity increases the sheer volume of information relevant to cooperative decisionmaking becomes overwhelming. It is unrealistic to expect members to be informed on all phases of cooperative decisionmaking.
The efficiency of member control can be enhanced through specialized committees dealing with single commodities or single aspects of operations.

Similarly, decentralizing decisionmaking authority to groups of member representatives (for instance, committees or delegates) to make specific types of decisions can increase the number of decisions members can act on.

**Structural Strategies for Unstable Environments**

When the organization’s environment is unstable, it is impossible to predict future situations. A cooperative’s environment may be unstable due to irregular price movements, rapid member turnover, unpredictable demand in international markets, or changing government regulations.

In a stable environment, an organization can standardize many of its activities to achieve coordination and predictability. In an unstable environment, it is not possible to standardize because new situations constantly occur that do not conform to rules. The organization must remain flexible so it can adapt quickly to new circumstances. Thus, organization theory tells us that in an unstable environment, it is inappropriate for an organization to routinize its responses through standardization.

A shifting, unpredictable environment calls instead for organizational strategies to increase the capacity to process information quickly. Two such strategies are investment in sophisticated vertical information systems and creation of lateral relationships. Vertical information systems collect information at the point of origin and direct it to appropriate places in the organization. Lateral relations decentralize decisions without creating permanent new structural units. Examples of lateral relations are direct interaction, liaison roles, and task forces.

Similarly, membership structures in stable environments can be spelled out by precise rules. Regular formal meetings are adequate to conduct business and stay in touch with member views.

In unstable environments such a strategy is ineffective. Instead, steps to increase the amount of information from the membership are appropriate. Vertical information systems and lateral relations can be used in member structures as well as operations structures. Examples of vertical information systems are a consumer panel and regular member surveys. Lateral relations devices for member structures include hearings, task forces, and ad hoc committees.

**Structural Strategies for Designing Membership Structure: Principles From Organization Theory**

Table 1 summarizes the previous discussion about how principles from organization theory may be applied to design membership structures that can be more effective when a cooperative faces an environment which is characterized by uncertainty because of diversity, complexity, and instability.

**Structural Strategies for improving information Flows**

The preceding applications of organizational design principles suggest how cooperatives operating in uncertain environments can improve their membership structure. They do not, however, show how membership and operations structures can be designed to interact effectively. A few principles from organizational communications theory are useful in this regard.

Organizational communications experts point out that a primary function of organizational structure is to restrict information flows. Although an organization must process information to coordinate group actions, if it is deluged with information it will become overloaded. Information “overload” is a state in which excessive communication

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<td><strong>Source of Uncertainty</strong></td>
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inputs cannot be processed and utilized, leading to breakdown. Ideally, structure prevents overload by restricting information flows and directing information only to those locations where it is most needed.

An organization’s structure guides information flows within the organization, because structure influences who reports to whom and who works with whom on a day-to-day basis. Therefore, it is possible to improve the efficiency of information flows by changing organizational structure.

Organizational information flows can be described in terms of an organization chart. The direction of information flows may be “horizontal” (among participants at the same level of the organization), or "vertical" (between organizational participants at different levels of the organization). Vertical information flows may be either downward (descending through vertical levels), or upward (ascending through vertical levels). Figure 3 depicts the parallel organization structures of a cooperative (operations structure and membership structure). We see that horizontal information flows include flows among members, between members and operating personnel, or between directors and the general manager. Downward flows include flows from the general manager to operating personnel and flows from the board of directors to the general membership. Upward flows include flows from operating personnel to the general manager and from the general membership upward to the board of directors.

Theorists have made several observations about organizational information flows in business organizations:

1. Horizontal communications are more frequent than vertical flows.
2. Vertical flows are subject to distortion and omission.

3. Downward communication flows are more frequent than upward flows.

4. There is a scarcity of upward negative feedback.

Horizontal information flows are more frequent than vertical flows because people are more prone to speak freely and openly to their peers than with superiors. At first glance, this observation may seem more pertinent to authority relations among employees of the cooperative than to relations between members of a cooperative. However, research indicates that cooperative members communicate more effectively and more often with neighbors and fieldmen than with their directors. Similarly, directors report that they base their judgments about cooperative affairs largely on data supplied by management.

Horizontal flows, though frequent, are more often informal than formal. Thus, the content and quality of the flow is not controlled. Information content may not be relevant to organizational objectives. Thus, the use of these channels may be improved by designing them into the structure of the organization and clearly defining the scope of relevant communication. Additionally, horizontal communications may lead to a closed circuit, with people neglecting to communicate to those in other levels of the organizational hierarchy. Thus horizontal channels need to be supplemented with structures for vertical communication.

Vertical flows are prone to distortion and omission because messages are apt to be interpreted differently by each individual in a communications chain. Different individuals will stress different aspects of a message and omit parts of a message they believe to be unimportant. This is the common phenomenon illustrated by the game of “telephone.” The more vertical levels information crosses in an organization, the more likely that the information will be distorted.

Information more often flows downward than upward through organizational levels. Participants at the top of the organization usually have more control over information and information resources than those at the bottom of the organization. For instance, they have more access to global information that affects everyone and they have support staff to write memos for them. Cooperative researchers have verified that members of some agricultural cooperatives have either infrequent or no communication with cooperative directors.

The scarcity of upward negative feedback in organizations is due to a desire to please superiors and negative incentives for reporting poor performance. Although these conditions are likely to apply in the operations structure of a cooperative they are not relevant to the membership structure. In fact, the relationship between directors and members is likely to cause a scarcity of negative information flowing down through the membership structure because directors are held responsible for cooperative performance and members may vote directors out of office.

Several structural strategies can be used to improve the efficiency of information flows in a cooperative. One strategy is to design a “flat” structure, with few hierarchical levels. Where there are few vertical levels in an organization, there are few status barriers to inhibit communication. Further, messages do not get distorted because they are not passed through multiple individuals in their path through the organization. Unfortunately, this strategy is not appropriate in many large organizations. Some of the advantages of a “flat” structure can, however, be gained by providing opportunities for top echelon officials to come into direct contact with members. The annual meeting of cooperatives provides one such opportunity. Neighborhood visits by cooperative directors and district meetings of directors with local members are other examples of this strategy. Alternatively, mechanisms such as an ombudsman, suggestions box, or similar devices allow individual members to bypass vertical levels.

A second strategy is to formalize information flows. To formalize something is simply to make it official. For instance, farmer members may often give field personnel their opinions about cooperative products and services. This sort of communication can be formalized by including it in the job description of field personnel as a recognized part of the job and encouraging them to actively gather and report this sort of information. Formal horizontal information flows can provide an important check on the power of top leaders. A strictly vertical information system limits information threatening to top officials from reaching those at the bottom of the organizational hierarchy. Horizontal flows between operational personnel and members may compensate for the reluctance of directors to report poor cooperative’s performance.

Probably the most widely used strategy to improve the efficiency of organizational information flows is standardization. Information flows are standardized when
they occur at regular intervals in a predetermined manner. A common example of a standardized information flow is a monthly report. Standardization affects information flows in several ways. First, a standard report is one way to formalize information collection, thus making it a legitimate activity. Second, standardization can reduce distortion and omission of information by requiring uniform language and prescribing which information is to be collected. Third, standardization can prevent information overload by focusing information collection on priority items. Finally, standardization can assure regular upward flows of information. Even flows of negative information can be improved by standardization. For instance, standardized complaint procedures legitimize complaints and make it easier to identify areas of weakness in cooperative products and services.

CASE STUDIES: THE MEMBERSHIP STRUCTURES OF EIGHT AGRICULTURAL COOPERATIVES

The previous discussion examined how dimensions of organizational structure and principles from organization theory can be applied to the design of membership structures of agricultural cooperatives. Next, eight agricultural cooperatives are used as examples to explore and illustrate the use of these concepts and principles. These case studies allow us to determine whether or not these organizational design principles have been put into practice by agricultural cooperatives; and, if so, whether these strategies have been successful in terms of improving member control of cooperative decisionmaking.

The eight case cooperatives were chosen to represent a wide assortment of sizes, commodity types, environmental conditions, and historical growth patterns. A wide variety was chosen to take into account the varying circumstances faced by agricultural cooperatives. Because structural problems become acute only when cooperatives become large, cooperatives were chosen from those with business volumes greater than $10 million. Only centralized or local cooperatives were chosen as cases.

The case cooperatives were not chosen in a random way and conclusions drawn from them cannot be applied to the entire population of agricultural cooperatives. However, since a wide array of circumstances are examined, it is likely that many cooperatives will recognize situations relevant to their own circumstances among the case materials.

Data Collection

Case study data were collected from two sources: from interviews with cooperative management personnel and member representatives; and from cooperative documents (bylaws, annual reports, organizational charts, etc.).

At the headquarters of each case cooperative, interviews lasting from 30 minutes to 1 hour were held with the general manager and key management personnel reporting directly to the general manager. In a few cases, managers in the third tier of the organization chart were interviewed to clarify decisionmaking responsibilities. A total of 42 cooperative personnel were interviewed.

The chairman or president of the board of directors was interviewed in all but one cooperative, where the vice-president was interviewed (the president was on vacation). In each cooperative where there were formal member structures other than the board, member representatives were interviewed-delegates, advisory committee members, and Young Couple group officers. A total of 14 member representatives were interviewed.

Method of Analysis of Case Cooperatives

Analysis of the case cooperatives is guided by the concepts drawn from organizational design and communications theory. The analysis illustrates the application of these concepts and demonstrates how they are used as tools for structural design of cooperatives.

The analysis of each case proceeds in the following way:

Step 1. The historical growth of the cooperative is briefly reviewed.

Step 2. The environmental conditions within which the cooperative operates are identified.

Step 3. Current operations and membership structures are described.

Step 4. Cooperative decisionmaking patterns, standardized information flows, and interactions between cooperative participants are described.
Organizational Charts and Measures of Dimensions of Membership Structure

Organization charts of the operations structures of the eight case cooperatives were drawn according to methods described in Van de Ven and Ferry.* The following rules were followed in drawing the charts of membership structures.

1. Elected positions are represented by solid outlines.

2. Rectangles represent positions that have independent decisionmaking authority.

3. Bodies with no independent authority are not counted as separate vertical levels (i.e., committees of board members reporting to the board).

4. Appointed positions are represented by broken lines, and are squared or circled depending on whether they have independent authority.

5. Member positions appointed by management and reporting to management only are not included in the membership structure.

6. The number of individuals in a membership group is shown only if the group is composed of separate individuals as opposed to being a subgroup of another body.

The dimensions of the membership structure measured from the membership charts are: membership size (number of members); number of vertical levels (number of levels of membership groups with independent authority); number of horizontal divisions (number of membership groups for the purpose of voting for the board of directors); basis of representation (the base on which the general membership is divided into groups to vote for the board of directors); the representative/member ratio (number of members divided by the number of elected representatives); and the degree of specialization (number of official member role titles).

To determine the degree of centralization of decisionmaking in the cooperative, the chairman of the board, general manager, and top line managers (managers reporting to the general manager) were asked to identify who had decisionmaking authority over 12 common cooperative decisions. Decisions were chosen that were likely to be important to members.

Patterns of information flow were explored by asking each interviewee to describe all standardized reporting relationships and interactions with other cooperative participants. “Standardized” was defined as documented in writing, regularly, scheduled, or customary. In addition to identifying opportunities for member voice, the examination of standardized information flows and interactions gives a feel for the general level of standardization in the organization.

Cooperative A
A Diversified Local Farm Supply Cooperative

Growth Cooperative A is a diversified farm supply cooperative offering a wide range of services to both producer and nonproducer members. This cooperative serves a trade territory that includes both an urban center and dairy and cash grain farms.

Two mergers with neighboring farm supply cooperatives allowed the cooperative to expand horizontally, broadening its member base and expanding existing operations to achieve economies of scale. Presently, the organization offers a complete line of products and services in the agronomy, petroleum-automotive, and feed areas, and operates three sites in two adjacent counties. Table A-1 summarizes Cooperative A’s growth.

Table A-1-Size of Cooperative A in number of employees, gross sales volume, and number of members, 1960-80

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees</th>
<th>Member</th>
<th>Gross sales volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>N/A</td>
<td>970</td>
<td>N/A</td>
</tr>
<tr>
<td>1965</td>
<td>19</td>
<td>990</td>
<td>0.2</td>
</tr>
<tr>
<td>1970</td>
<td>24</td>
<td>6,551</td>
<td>1.7</td>
</tr>
<tr>
<td>1975</td>
<td>32</td>
<td>8,027</td>
<td>3.4</td>
</tr>
<tr>
<td>1980</td>
<td>46</td>
<td>9,994</td>
<td>8.9</td>
</tr>
</tbody>
</table>


*Includes both producer and nonproducer members.
Figure A-1

Operations Structure of Cooperative A, March 1983

Source: Cooperative documents and interviews with cooperative personnel, March 1983.
Diversity, Complexity, and Instability Cooperative A’s membership is moderately diverse. Member farms are of two types, dairy and cash grain. Farm size varies moderately. Members are concentrated in a local area. The cooperative serves both producer members and urban consumers and offers a large variety of goods and services to serve these two distinct market segments.

Management personnel felt the cooperative’s operations were moderately complex because of a high rate of technological change in agricultural input lines. Managers named the unpredictability of the current agricultural economy as the primary source of instability for their operations.

Operations Structure Cooperative A’s operations structure is horizontally divided into four divisions by product-line. Three vertical levels are present.

This structure is new to Cooperative A, adopted 2 years ago when a new general manager began. Initially, 12 employees from 3 sites were reporting directly to him. The result was information overload, and the manager was left with no time to handle crucial problems. The new manager reorganized the cooperative’s operating structures to adapt them to the needs of a growing, diverse business in an increasingly complex environment. His design strategy was to create horizontal divisions to deal with similar segments of the environment and to increase the number of supervisory personnel. Decisionmaking was decentralized to newly created division managers. Figure A-1 depicts cooperative A’s operations structure.

Membership Structure Cooperative A’s membership structure is based on eight geographical districts (figure A-2). Seven of these are producer districts and one is a nonproducer district. One director from each district is elected at large by the membership. The director from the nonproducer district does not have voting rights. Directors serve 3-year staggered terms, and may only serve for three consecutive terms.

The board of directors divides its work among seven specialized committees, an elected executive committee, and six committees appointed by the board president.

Cooperative A’s membership structure has been slowly evolving in recent years. The cooperative’s districts were redrawn in the course of merger proceedings, adding districts to represent members from the merging cooperatives and reducing the urban territory from two districts to one. Two years ago the cooperative’s bylaws were changed to distinguish between Class A producer members and Class B nonproducer members. At the same time, the nonvoting nonproducer directorship was instituted.

The number of terms a director may serve was limited recently because some members felt they did not have adequate control over cooperative decisionmaking. Members from the territory of the most recently merged cooperative were upset when some services were discontinued at the former cooperative’s site. These members brought a resolution to the floor of the annual meeting limiting the terms of directors.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Levels:</td>
<td>1</td>
</tr>
<tr>
<td>Horizontal Divisions:</td>
<td>8 Districts</td>
</tr>
<tr>
<td>Basis of Representation:</td>
<td>Geography &amp; Membership Class</td>
</tr>
<tr>
<td>Representative/Member Ratio:</td>
<td>1:838</td>
</tr>
<tr>
<td>Specialization:</td>
<td>8 Roles</td>
</tr>
</tbody>
</table>
In summary, Cooperative A has adjusted its membership structure to growing numbers of members mainly by modifying the geographic base of representation. No vertical levels have been added, and horizontal division has been limited, yielding a very low representative to member ratio. The board has specialized into committees, allowing it to more efficiently monitor the cooperative’s diverse and complex operations.

Decisionmaking, Information, and Interaction The board of Cooperative A retains final authority over all decisions involving capital structure, new enterprises, allocation of patronage refunds, and purchases of capital equipment over $2,000. Although specialized committees are used to review issues and recommend decisions, decisionmaking is centralized at the board level. All committee recommendations must be approved by the full board. The executive committee of elected officials is authorized to act in specified personnel matters, but otherwise brings decisions to the full board.

The board receives a monthly financial statement, a report detailing all lost accounts, and a report on the cooperative’s current grain position. The finance committee receives a quarterly report on accounts receivable.

Members receive an annual financial report at the annual meeting. All members also receive a bimonthly newsletter that contains a message from the general manager and each of the division managers.

There are no structural mechanisms for flows of information between directors and members.

The general manager meets with the board at their monthly meetings. He/she also attends monthly executive committee meetings. The petroleum division manager meets with the finance committee quarterly. Other division managers meet with the board or board committees when an issue is addressed that requires their input.

Division managers interact with members at frequent product meetings (educational) and at the annual Farm Expo held as part of daylong annual meeting activities.

A year ago, directors made a series of farm calls in their districts to find out if members are satisfied with cooperative activities. This year, ‘farm forum’ meetings, chaired by the district director, were held in each district for the same purpose.

Summary As Cooperative A has grown, it has divided its operations structure horizontally by product and adopted three vertical levels. This is an appropriate strategy to accommodate its complex and diversified operations.

It has responded to the diversity of its membership by redistricting and creating separate classes of membership from producers and nonproducers. No vertical levels have been added to the membership structure; thus, the representative/member ratio remains quite low (1:838). Discontent expressed by some members with limited opportunity to play an active role in cooperative decisionmaking suggests that adding other elected member positions may be a useful design strategy.

The directors of Cooperative A have attempted to provide an additional avenue of information flow from the members to their director through farm calls and farm forums. A permanent structural mechanism for this purpose may be appropriate.

Cooperative B A Rapidly Growing Supply and Marketing Cooperative

Cooperatives B’s growth in members, employees, and sales dollars has been largely internal. Cooperative B bought a second facility and built a third. The cooperative has grown steadily by expanding both its bean and grain handling operations and its sales of farm supplies.

Diversity, Complexity, and Instability Eighty-five percent of the cooperative’s members reside within 15 miles of cooperative facilities. Farm size varies

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees</th>
<th>Producer members</th>
<th>Gross sales volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>N/A</td>
<td>807</td>
<td>2.3</td>
</tr>
<tr>
<td>1965</td>
<td>28</td>
<td>1,418</td>
<td>4.0</td>
</tr>
<tr>
<td>1970</td>
<td>30</td>
<td>1,781</td>
<td>4.7</td>
</tr>
<tr>
<td>1975</td>
<td>42</td>
<td>2,313</td>
<td>22.3</td>
</tr>
<tr>
<td>1980</td>
<td>53</td>
<td>2,519</td>
<td>30.1</td>
</tr>
</tbody>
</table>
Operations Structure of Cooperative B, September 1982

General Manager

Traffic and Bean Reporter

Grain Merchandiser

Agronomist

Plant Superintendent

Supply Manager

Comptroller

Receptionist

Accounting Manager

Plant Supervisor


Employees

Employees

Employees

Employees

Employees

Manager—Beans

Grain Supervisor

Maintenance Supervisor

Source: Interviews with Cooperative Personnel, September 1982
moderately, but most producer members raise mostly cash crop grain and beans. In summary, the membership is relatively homogeneous. The cooperative offers a moderate variety of goods and services.

Cooperative B’s operations are only moderately complex. Complexity is seen as increasing, however, as farmer member operations continue to grow in size and sophistication. Management perceives the cooperative’s environment as fairly stable.

**Operations Structure** The operations structure of Cooperative B has changed slowly with the growth of the business. Vertical levels were added to coordinate the operations at new facilities. Specialists were hired, an agronomist and a grain merchandiser.

Figure B-1 shows that Cooperative B’s operations structure is horizontally divided along functional lines. Vertically levels have been added to the handling operations. Interviews with management personnel reveal that the general manager has retained most decisionmaking authority.

**Membership Structure** The membership structure of Cooperative B is simple, consisting of a board of nine directors elected at large from the membership (figure B-2). The ratio of representatives to members is low as a result (1:280). Director terms are 3 years, and terms are staggered. The membership is not divided into geographic units, nor along any other dimension, for the purpose of electing representatives.

A specialized committee structure is used by the board. The chairman of the board reports that the executive committee, elected by the board, is used as a ‘sounding board’ rather than an independent decisionmaking unit.

**Table B-2-Dimensions of the membership structure of Cooperative B**

<table>
<thead>
<tr>
<th>Vertical Levels:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal Divisions:</td>
<td>0 (Entire Membership Only)</td>
</tr>
<tr>
<td>Basis of Representation:</td>
<td>None</td>
</tr>
<tr>
<td>Representative/Member Ratio:</td>
<td>1:280</td>
</tr>
<tr>
<td>Specialization:</td>
<td>8 Roles</td>
</tr>
</tbody>
</table>

On the other hand, the accounts receivable committee is empowered to take action independent of the board.

**Decisionmaking, Information Flows, and Interactions** The board of Cooperative B makes many of the organization’s strategic and administrative decisions. Generally, purchases over about $5,000 are submitted for approval. Quality premium decisions must be approved by the board. Market strategy is decided by management.

The board receives the monthly financial report when it meets each month. The membership receives a financial statement in the annual report at the annual meeting. In addition, members receive a monthly newsletter containing messages and information from the general manager and top-line managers.

An employee may file a formal complaint form with a director on the employee relations committee. This provides a mechanism for the upward flow of negative information through the operations structure to the board. There is no similar standard procedure for member complaints.

About 8 years ago, the general manager instituted a member advisory board in order to stay in touch with the
membership. He chooses eight progressive, open-minded members and asks each of those to choose three additional members. The advisory board meets four times a year to discuss suggested improvements, policy issues, etc. The general manager feels the advisory board is an important source of information about member preferences, but stresses that the group is solely advisory, with no independent decisionmaking authority. All top-line managers and board members regularly attend advisory board meetings. Board members do not preside at these meetings.

Product meetings and two grain marketing meetings (all educational) are held for all interested members during the winter months, providing an opportunity for members to interact with management staff.

Attendance at the annual meeting is encouraged by distributing patronage refunds there. About 20-25 percent of members attend.

Summary Cooperative B is a moderately diversified supply and marketing cooperative serving a fairly homogeneous group of producer members concentrated in a local area. Operating in a relatively simple and stable environment, it has evolved an operations structure with a low degree of specialization and centralized decisionmaking.

The board of directors has assigned tasks to specialized committees, but for the most part retains final authority for decisions. There are no structural channels for member input to the board or for information flows from the board to membership.

The general manager’s use of a member advisory board indicates a felt need for more member input to cooperative decisionmaking. Given a stable environment, formal membership structures are an alternative for fulfilling these informational needs.

Cooperative C
A Geographically Dispersed Livestock Marketing Cooperative

Growth Livestock producers in six counties formed a livestock marketing cooperative, and then merged with a similar cooperative in an adjoining state. Later, the cooperative moved out of several product lines to specialize in marketing only one type of animal. Since then, the growth of Cooperative C has been internal, built on increasing sales volume and close attention to maintaining a high-quality product. The cooperative now operates 10 facilities located in 3 States. Table C-I illustrates Cooperative C’s steady growth in sales volume and number of employees.

Diversity, Complexity and Instability Cooperative C’s members are scattered over four States. Some are single-commodity operations, while others are of a ‘mixed-farming’ type. Member operations range from a few animals to over a thousand. In summary, Cooperative C has more diverse membership than most of the case cooperatives. In contrast, the diversity of Cooperative C’s operations is low: only one product is sold.

Management personnel at Cooperative C feel that its environment is moderately complex and unstable. Concentration among buyers produces a stiffly competitive environment. Continual quality control must be maintained, requiring close coordination with the operations of member producers. A high level of integration in the marketing chain and fast flows of information by radio and teletype also contribute to complexity. Instability stems from rapid price fluctuations.

Operations Structure Cooperative C’s operations structure (figure C-I) has undergone several changes in recent years. Previously, there were two directors of production: these were merged into one to better coordinate operations. Currently, Cooperative C has a flat structure with little horizontal division of the executive management. Horizontal division is based on function. Vertical levels are few. The level of specialization is low.

Table C-I-Size of cooperative C in number of employees, gross sales volume, and number of members, 1960-80

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees</th>
<th>Producers members</th>
<th>Gross sales volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>31</td>
<td>4,280</td>
<td>2.9</td>
</tr>
<tr>
<td>1965</td>
<td>31</td>
<td>6,450</td>
<td>6.6</td>
</tr>
<tr>
<td>1970</td>
<td>50</td>
<td>8,840</td>
<td>8.1</td>
</tr>
<tr>
<td>1975</td>
<td>64</td>
<td>2,051’</td>
<td>12.8</td>
</tr>
<tr>
<td>1980</td>
<td>75</td>
<td>2,442</td>
<td>21.2</td>
</tr>
</tbody>
</table>

*Reflects a change in membership requirements.
Source-Cooperative documents and interviews with cooperative personnel, October 1982.
Membership Structure Cooperative C has a sophisticated membership structure (figure C-2) with a delegate system, resolutions and districting committees elected by the membership, and a board of seven directors serving staggered 3-year terms. Directors are elected from geographic districts.

This present structure is recent. Previously the membership elected a delegate for every 15 members and a separate advisory committee. Now, 1 delegate represents 45 members and the delegates serve as an advisory board as well. This was done to reduce annual meeting expenditures. In addition the districting committee, which used to meet each year, now meets only once in 3 years. This change was made because frequent redistricting deprived some members of voting for a director for many years.

Delegates are elected from their district to serve a 1-year term. Two alternates per district are also elected. Likewise, each district elects a representative to serve on the resolutions committee for 1 year. These structures provide a high representative/member ratio (1:32). The board has an executive committee, but no other specialized committees.

Decisionmaking, Information Flows, and Interaction The board of directors makes all final decisions on capital structure, member policy, new enterprises, patronage allocation, purchases over $1,500, and quality premium programs. The board’s executive committee does not have independent authority to make decisions. It meets only to examine vouchers and payroll.

Decisionmaking is decentralized to the delegate body.
through the resolutions process. The delegates vote to approve or disapprove resolutions compiled by the resolutions committee.

Board members receive weekly procurement and trucking reports and a weekly summary letter from the general manager. They receive a financial statement at their monthly meetings. Policy changes made by the board of directors are disseminated to employees through a formal letter from the general manager.

Delegates and members receive a financial report, production report, general manager’s report and director’s report when they meet. In addition, all members receive a monthly newsletter from the management.

Members have been encouraged to use a WATS lines recently installed, to communicate any comments they might have to management. This provides a mechanism to bypass vertical levels.

Members meet in their districts once a year. These meetings are chaired by the director from the district and attended by management personnel. Attendance is good (about 25 percent of members), encouraged by awards ceremonies for members. All members are also welcome at the annual meeting.

Delegates meet three times a year, once at the annual meeting, once jointly, and once grouped by eastern and western districts. The board president presides at these meetings. General manager, assistant manager, production managers, and board members attend.

**Summary** Although Cooperative C’s executives indicated a complex and dynamic environment, the operations structure of the organization has few vertical levels and minimal specialization. The lack of horizontal division is, however, what would be expected from the low diversity of operations.

Cooperative C’s membership is widely scattered over four states, so it is divided into geographic districts. Although there is no independent decisionmaking at the district level, districts are key components of cooperative governance, serving as the base of representation and the key focus for member interaction with management and with their director. A delegate structure is used to increase flows of information from members to both board and management. An independently elected resolutions committee provides an additional avenue for member input into cooperative decisionmaking.

A well-developed membership structure and numerous standardized interactions between members, management, and board of directors provides Cooperative C’s far-flung membership with multiple points of access to cooperative decisionmaking.

**Cooperative D**

**A Multимерger Grain Marketing Cooperative**

**Growth** Cooperative D was born from the merger of two local grain marketing and supply cooperatives. Since then, the cooperative has grown rapidly through multiple mergers. Today it markets grain and supplies, feed, fertilizer, and petroleum products to its members from 10 local sites.

**Table D-1-Size of cooperative D in number of employees, gross sales volume, and number of members, 1960-80**

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees</th>
<th>Producer members</th>
<th>Gross sales volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960'</td>
<td>9</td>
<td>327</td>
<td>1.0</td>
</tr>
<tr>
<td>1965'</td>
<td>6</td>
<td>367</td>
<td>3.0</td>
</tr>
<tr>
<td>1970</td>
<td>12</td>
<td>440</td>
<td>3.9</td>
</tr>
<tr>
<td>1975</td>
<td>38</td>
<td>979</td>
<td>34.0</td>
</tr>
<tr>
<td>1980</td>
<td>87</td>
<td>1,989</td>
<td>97.1</td>
</tr>
</tbody>
</table>

--- Number ---

<table>
<thead>
<tr>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
</tr>
<tr>
<td>3.0</td>
</tr>
<tr>
<td>3.9</td>
</tr>
<tr>
<td>34.0</td>
</tr>
<tr>
<td>97.1</td>
</tr>
</tbody>
</table>

'Data from the larger of the original two cooperatives which merged to form Cooperative D.
Figure D-I

Operations Structure of Cooperative D, February 1983

Source-Cooperative documents and interviews with cooperative personnel, February 1983.
**Diversity, Complexity, and Instability** The membership of Cooperative D resides in the counties adjacent to its headquarters. Members are similar in terms of farm size and type of operation. Diversity of operations is moderate in comparison with other case cooperatives.

The top-line managers of Cooperative D rate its operations as highly complex in comparison to the other case cooperatives. This complexity is ascribed to the large volume of operations and the low margin for error. The environment is, however, moderately stable.

**Operations Structure** The operations structure of Cooperative D has changed often in the last 10 years as a result of mergers. As operations grew more complex, specialists were hired. As new cooperatives merged into Cooperative D, the span of control of its general manager increased steadily. Then two more managers were added to the structure—a director of administration and a director of operations—and a third vertical level appeared as regional managers were added as well.

Cooperative D’s operations structure today, as shown in figure D-1, has only two horizontal sections, based on function. The organization has adapted to complexity by adding levels and through specialization.

**Membership Structure** As the cooperative has grown, its membership structure has changed also. When the original two cooperatives merged, their boards were combined. As more cooperatives were merged, the membership was organized into geographic districts (figure D-2). For several years, branch meetings were held at local sites. These meetings were, unfortunately, so ill attended that they were discontinued by joint agreement of the board and the general manager.

Currently, members are divided into four districts for nomination purposes only. A board of 11 directors, elected at large, serve staggered terms of 3 years. Nominees are selected from each district with a director seat open, but at-large voting does not assure that a director from each district will be chosen. There is some pressure to change to a district-based voting procedure and representative structure. There is no local-level membership structure.

The board has specialized little. An equipment committee appointed by the president considers major purchases and recommends action to the full board. There is an executive committee, but it seldom meets.

---

**Table D-2-Dimensions of the membership structure of Cooperative D**

<table>
<thead>
<tr>
<th>Vertical Levels:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal Divisions:</td>
<td>None (Entire membership only)</td>
</tr>
<tr>
<td>Basis of Representation:</td>
<td>None (At large)</td>
</tr>
<tr>
<td>Representative/Member Ratio:</td>
<td>1:180</td>
</tr>
<tr>
<td>Specialization:</td>
<td>3 Roles</td>
</tr>
</tbody>
</table>

**Decisionmaking, Information Flows, and Interactions** The board makes final decisions about capital structure, membership policies, new enterprises, patronage refunds, major purchases of capital equipment, and volume discount policy. The general manager and grain merchandiser jointly make marketing strategy decisions. The board is informed of marketing decisions and may place constraints on the cooperative’s market position.

The board has not specialized decisionmaking functions, nor has it delegated authority to committees.

Monthly financial reports are made at board meetings. In addition, the director of operations and the grain merchandiser make monthly reports to the board.
Members receive a monthly newsletter containing market and policy information from the management. In addition to the financial report at the annual meeting, members are supplied with a financial report in midwinter.

No structural mechanism guides input of information from members to the board. Branch meetings, as mentioned before, were attempted with little success. The board meets formally with members only once a year, at the annual meeting. Annual meeting attendance is encouraged by distribution of dividend checks and a Family Feast with day-long activities for members and their families.

Member discontent over several policy and pricing issues, and expressed feelings over ‘losing control over their cooperative’ because of mergers, prompted the general manager to personally invite groups of members to 30 meetings last winter. The purpose of these meetings was to garner member input and establish personal contact with the cooperative’s patrons. Board members did not attend these meetings. The general manager expressed satisfaction with these meetings and plans to continue them.

A midwinter meeting, chaired by management, provides an additional opportunity for members to meet and get up-to-date information on cooperative operations. Informational product meetings for membership are held irregularly. In addition, educational meetings for women have been held for the last 3 years. These events are well attended and popular.

Summary Rapid growth through merger has led Cooperative D through many structural changes in the last 10 years. Operating in a complex, moderately stable environment, it has chosen a functionally based structure that delegates decisionmaking vertically through four levels of management.

The uniform and geographically concentrated membership of the cooperative is represented by a board of 11 members elected at large. Some members feel estranged from control of cooperative operations and have expressed a preference for a district-based representative structure.

Additional avenues of member input are desirable, but branch meetings, attempted several years ago, were poorly attended. Currently, member meetings with the general manager fill the input void, but additional permanent membership structures could assure continuing member input by raising the representative/member ratio.

Cooperative E
A Highly Diversified
Supply and Marketing Cooperative

Growth Originally organized to supply feed, Cooperative E has a history of steady internal expansion through diversification. Today, the enterprise supplies feed, fertilizer, hardware, building materials, petroleum products, and automotive vehicles to 1,009 farmer members and numerous urban patrons. It also markets eggs for about 25 of its farmer members.

Table E-1 depicts the steady growth of Cooperative E in the last 20 years. It reveals slow growth in the number of farmer members and a nearly constant number of employees. Rapid sales growth is attributable to the larger operations of farmer members and increasing sales to urban patrons.

Diversity, Complexity, and Instability The diversity of Cooperatives E’s operations is obvious, stemming from the wide diversity of products it supplies. Its membership is relatively diverse as well. Although a large majority of members live within a 15-mile radius of the cooperative, farm operations include poultry, swine, and dairy. Farm size varies substantially as well. A strong component of urban business adds to this diversity of member interests.

Managers rated the complexity of Cooperative E’s operations as low. Most noted a trend toward increasing complexity because producer-members require additional services and information. Increasing complexity was also attributed to higher costs and lower margins which allow for less slack in the operation.

Table E-I-Size of cooperative E in number of employees, gross sales volume, and number of members, 1960-80

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees</th>
<th>Producer members</th>
<th>Gross sales volume</th>
<th>Measure of size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>130</td>
<td>970</td>
<td>6.0</td>
<td>- - Number - -</td>
</tr>
<tr>
<td>1965</td>
<td>130</td>
<td>990</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>140</td>
<td>1,000</td>
<td>18.5</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>145</td>
<td>1,000</td>
<td>18.8</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>140</td>
<td>1,009</td>
<td>32.8</td>
<td></td>
</tr>
</tbody>
</table>
Figure E-I

Operations Structure of Cooperative E, September 1982

Source-Cooperative documents and interviews with cooperative personnel, September 1982.
A dynamic environment was indicated, with most managers citing the general state of the economy as the cause. (Cooperative E is located in an area particularly hard-hit by current economic woes.)

**Operations Structure** Cooperative E has responded to its diverse product line by horizontal division of its operations structure on a product basis (figure E-1). Separate feed and fertilizer departments have been added in the last 3 years. Along with this change, decisionmaking was decentralized, giving department heads more responsibility for hiring, wage-setting, and pricing. The general manager felt these structural changes lessened coordination problems and strengthened relationships with producer members in each of the product area.

**Membership structure** Although the membership of Cooperative E is diverse, its membership structure has remained extremely simple (figure E-2). It consists solely of a board of six directors elected at large from the membership. There is no specialized committee structure. Neither is there an executive committee. Table E-2, reporting the dimensions of the membership structure, confirms the lack of structural adaptation and a low representative/member ratio (1:167).

**Decisionmaking, Informational Flows, and Interaction** The board retains decision power for all changes in capital structure, new enterprises, and patronage disbursements. There is no delegation of the decisionmaking powers of the board. Most capital equipment purchases (except for 'major facilities') may be implemented by management without board approval.

The board of directors receives a monthly financial statement. Grain reports are supplied at request. There is no regular publication for members. Members receive an annual report only if they attend the annual meeting or request one.

The general manager and assistant manager attend the monthly meeting of the board of directors. Department heads may attend to address specific issues, but only infrequently.

Interactions between department heads and members are informal. The egg department manager reports daily informal contact with member egg producers. Feed and fertilizer heads make regular farm calls to maintain contact with members. These departments also hold several informational product meetings for members each year.

The annual meeting provides the only formal opportunity for members to meet with board and management and to ask questions of them.

**Summary** Cooperative E has responded to its diverse, simple, dynamic environment by horizontally dividing its operations structure on product lines, and decentralizing decisionmaking to department heads.

The membership structure, in contrast, has not evolved. The small board, unspecialized into committee functions, maintains control over a minimum of organizational decisions. There are few channels for diverse member interests to be communicated to appropriate decision points within the organization. There is little structural opportunity for the rich input of member voice indicated as desirable in a dynamic economic environment.
Cooperative F
A Vertically Integrated Citrus Cooperative

Growth Formed in 1909 to handle citrus products, Cooperative F has become a highly integrated grove-to-market citrus operation. The cooperative began as a packing operation, with members doing their own grove work. Over the years the cooperative expanded by offering grove services to its members. Eventually, the cooperative moved into marketing its own fruit. Today, Cooperative F performs complete enterprise management for its members. All grove care functions, from seedling supply and planting to picking the fruit, are performed by cooperative employees.

Cooperative F's growth in the last 20 years has been internal. Total acreage and production per tree have increased substantially, contributing to increasing sales volume. Membership has increased, but slowly. This slow growth in members has been a deliberate choice of the board of directors (who approve all new memberships). The number of year-round employees has remained fairly constant over recent years.

In summary, the growth of Cooperative F has been largely internal. Growth has occurred through integration of all phases of the citrus operations of its members and through improved productivity.

Diversity, Complexity, and Instability Members are homogeneous as to commodity type (all citrus growers). Most are small grove owners whose groves have been in their families for generations. Turnover of membership is very low. Although most of the groves served are within 15 miles of cooperative facilities, nearly half of the members reside out of State.

Cooperative F markets only to the fresh fruit market and mainly to retailers close to the consumer. Market diversity is low. Product diversity is relatively low as well. Although a number of citrus varieties are sold in a variety of packs, production, packing and marketing methods are similar for all citrus products marketed.

Operations are only moderately complex. Managers perceive complexity to be increasing, however, due to the growing impact of imports.

Although the vagaries of weather will always lend a degree of unpredictability, in some ways the citrus business has become more stable through the years. The processed market for citrus products, developed in the 1940's, now comprises the largest share of citrus usage. The diversity of uses for the processed product and its longer shelf life lend stability to citrus markets. Direct sales of fresh fruit to retailers, the current sales practice, is a much steadier market than the speculative auction and consignment sales of the past.

Operations Structure Bit by bit, changes have been made in the operations structure of Cooperative F. The trend has been toward increasing structural elaboration, adding both vertical levels and horizontal divisions (figure F-1). In recent years, several new managerial positions have been added to the organization to meet the coordination requirements of a highly integrated operation in a stable environment.

Membership Structure The membership structure of Cooperative F is simple (figure F-2). A board of 11 directors is elected at large for 1-year terms, with no limit to the number of terms a director may serve. There is no nominating committee; all members are 'on the ballot' for each election. Proxy votes are allowed, however, with all proxies voted by the incumbent board. Since nearly half of the members reside out of State, this procedure gives the incumbent board a definite advantage. Consequently a director, once elected, generally serves until he chooses to retire. The inequity of the system has been noted by younger members. The current board president reports that a nonboard nominating committee is the next likely structural addition to the membership system.

The board is divided into five specialized committees appointed by the president. An executive committee of

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees</th>
<th>Producer members</th>
<th>Gross sales volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>N/A</td>
<td>171</td>
<td>2.6</td>
</tr>
<tr>
<td>1965</td>
<td>N/A</td>
<td>222</td>
<td>4.3</td>
</tr>
<tr>
<td>1970</td>
<td>N/A</td>
<td>240</td>
<td>5.3</td>
</tr>
<tr>
<td>1975 approx.</td>
<td>160</td>
<td>248</td>
<td>9.6</td>
</tr>
<tr>
<td>1980 approx.</td>
<td>160</td>
<td>249</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Table F-1-Size of cooperative F in number of employees, gross sales volume, and number of members, 1960-80
Figure F-1
Operations Structure of Cooperative F, November 1982

Source-Cooperative documents and interviews with cooperative personnel, November 1982
three, elected by the board, was added several years ago because decisionmaking was necessary more frequently than monthly. The executive committee has authority to act, but must report its decisions to the full board within 7 days.

**Decisionmaking, Information Flows, and Interactions** The board of directors for Cooperative F retains final decisionmaking responsibility for many strategic and administrative decisions. It is particularly involved in all membership decisions. All new members are screened by the membership committee and must be approved by the full board. Purchases of capital equipment over $2,000 must be approved by the board. In addition, the board sets all charges for cooperative services such as picking, hauling, and packing.

The board depends heavily on its committee structure for decisionmaking. Although committee decisions must be formally approved by the board, most are approved unchanged.

Information flows from decisionmakers in the operations structure to the board and the general membership are standardized. The board gets a monthly financial report from the secretary-treasurer. The sales manager, secretary-treasurer, director of operations, and general manager make monthly oral reports to the board. These reports are regularly mailed to all members. In addition, a sporadic bulletin from the general manager is mailed to all members, as is an informative annual report.

Committee members receive additional regular reports
from management. Managers of Cooperative F regularly receive copies of the minutes of both board and committee meetings.

The monthly board meetings of Cooperative F are open to all members. The board meets privately for 30 minutes before the meeting is opened to the general membership. About 30 members attend these meetings regularly. Members are permitted to ask questions of both board members and management.

Management meets regularly with board committees, making recommendations about service charges, purchases, pooling, and other committee decisions. The general manager attends all committee meetings.

Summary Cooperative F, a highly integrated production-to-market operation, acts in an environment which is complex but stable and uniform. The membership of Cooperative F is small and uniform, but dispersed. The membership structure is simple, with few vertical levels and no horizontal divisions. The board has specialized its work into committees and takes an active role in many important strategic and administrative decisions.

Decisionmaking responsibility is decentralized through the board’s committee structure, although the full board retains final authorization. Management personnel work closely with these committees, supplying technical information and recommendations to the decisionmaking process. Members are kept well informed through frequent mailings and open board meetings. Local members have frequent opportunity to input information to the decision process through the open meeting format. The small membership size and the flat membership structure encourage information flows from the members to the board of directors. The current electoral procedures of the organization do, however, constrain the opportunities for members to acquire an authoritative role in cooperative decisionmaking.

Cooperative G
A Service Cooperative
with a Large, Dispersed Membership

Growth Cooperative G arose from the merger of five artificial insemination cooperatives in the mid-1960’s. Since that time, its growth has been largely internal through expansion of geographic markets and horizontal diversification. Market expansion continues to the present.

Today, Cooperative G operates four sites in the North Central States. It provides artificial insemination (A.I.) service for members in five States and direct sales of semen in many areas, both domestic and international.

Falling numbers of members, indicated in table G-1, reflect two conditions. First, subsequent to the merger forming the cooperative, many nonactive members were carried on the books. Second, the trend toward fewer and larger farms has decreased the number of patrons in the cooperative’s service territory.

Diversity, Complexity, and Instability Cooperative G’s membership is rather diverse. Members are dispersed among five States; beef and dairy operations are included; and the size of member operations varies substantially.

The diversity of Cooperative G’s operations is moderate. Although product diversity is relatively low, A.I. services, direct-to-farmer sales, and distributor sales represent unique market segments. Further, Cooperative G sells semen in both domestic and international markets.

Table G-1-Size of cooperative G in number of employees, gross sales volume, and number of members, 1960-80

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees</th>
<th>Producer members</th>
<th>Gross sales volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960*</td>
<td>192</td>
<td>27,746</td>
<td>1.9</td>
</tr>
<tr>
<td>1965</td>
<td>176</td>
<td>26,785</td>
<td>2.0</td>
</tr>
<tr>
<td>1970</td>
<td>365</td>
<td>35,298</td>
<td>4.6</td>
</tr>
<tr>
<td>1975</td>
<td>304</td>
<td>28,724</td>
<td>6.6</td>
</tr>
<tr>
<td>1980</td>
<td>294</td>
<td>22,946</td>
<td>13.2</td>
</tr>
</tbody>
</table>

*Figures represent the largest of the premerger cooperatives only.

Table F-2-Dimensions of the membership structure of Cooperative F

| Vertical Levels: | 2 |
| Horizontal Divisions: | 0 (Entire Membership Only) |
| Basis Representation: | None |
| Representative/Member Ratio: | 1:27 |
| Specialization: | 7 Roles |
Figure G-I

Operations Structure of Cooperative G, October 1982

Source-Cooperative documents and interviews with cooperative personnel, October 1982.
Membership Structure of Cooperative G, October 1982

Executive Committee

Board of Directors (11)

Breed Advisory Committee (90)


Redistricting Committee (11)

Delegate Body (154) and Alternates (154)

Regions (11)

Districts (60)

Members (22,946)

Source-Cooperative documents and interviews with cooperative participants, October 1982.
Executive managers of Cooperative G rated operations complex. Complexity stems from the highly technical nature of breeding programs. Governmental regulation is another source of increasing complexity, especially in the international trade.

The environment is relatively stable, however. Since members view breeding programs as an important long-term investment, sales are fairly predictable even in a tight economy. International sales are much less predictable than domestic markets, and have decreased the stability of the organization’s environment in recent years.

**Operations Structure** Cooperative G’s operations structure is horizontally divided into five sections based on both function and market. It is separated into four vertical levels (figure G-1).

Much of the horizontal division has occurred since the 1967 merger. In the early 1970’s the marketing division was split into member and distributor divisions. In the mid-70’s a genetics expert was hired, and the former operations division was horizontally divided into a production division and a genetics division. Many specialists have been added to Cooperative G’s staff in recent years.

**Membership Structure** Cooperative G has a well-developed member structure with a delegate system, elected redistricting committee, and a breed advisory committee specialized by breed (figure G-2).

Cooperative G’s membership is divided into 11 geographical regions with approximately equal numbers of members. These regions are subdivided into districts for the purpose of electing delegates. Each district elects one delegate per each 150 active members in the district to serve a 1-year term. One alternate is elected for each delegate.

Delegates caucus by region at the annual meeting to nominate one director for office. Directors are elected at large by the delegate body, but this is largely a confirmation of selection by the regional delegates. Once each 3 years, a redistricting committee member is elected by the delegates of each region.

The 11 directors serve 1-year terms, with no limit to the number of terms a director may serve. An executive committee of officers elected by the board is empowered to take independent action, but, in fact, rarely meets. There are no other board committees.

There have been few changes in this structure since the formation of Cooperative G. The most significant change is the addition of a breed advisory committee of 30 members appointed by the board to serve 4-year terms. The advisory committee is divided into specialized subcommittees by breed. This committee is advisory to both board and management.

In short, Cooperative G has a membership structure vertically separated into three levels. Horizontal division is extensive: the membership is divided into 60 districts to vote for delegates. Although the board has not developed specialized committees, specialized breed advisory committees provide member input in a technologically complex environment.

**Decisionmaking, Information Flows, and interaction** The board of directors retains final approval of all capital structure, membership strategy, and new enterprise, and allocations decisions. Any change in the charge for technician services is made by the board, based on alternatives presented by management. All other pricing decisions are delegated to management, though the board’s official pricing policy guides these decisions. All capital purchases over $200 must be approved by the board of directors.

Although the operations of Cooperative G are technologically complex, the board of directors maintains significant control over decisionmaking through the power of final authorization and through highly standardized oversight procedures. Division heads report to the board annually through a formal planning and budgeting exercise. Yearly goals are presented and objectives are targeted by date. The board approves budgets presented by division heads.
Decisionmaking authority is decentralized from the board to the delegate body through the resolutions process. Resolutions are presented to district members and forwarded to the delegate body for a vote. The process allows binding decisions to be made at the delegate level.

The board of directors receives monthly financial reports and quarterly budget comparisons. Directors also receive much of the standard operating information generated by the computer system. At each monthly meeting the general manager makes a progress report and summarizes the monthly reports of each division head. Directors receive mailings about any significant developments between board meetings.

Delegates receive quarterly mailings that include financial and sales summaries, and results of genetic evaluations from outside sources (e.g., USDA). The annual report is mailed to all delegates and alternates.

Members receive an annual financial report at their district meetings. They also receive a monthly newsletter that includes educational materials, product information, cooperative news, and some financial information.

The breed advisory committee receives frequent mailings from the genetics division and is irregularly polled on technical issues.

A management team and the regional director are available at each district meeting. At these, question cards are circulated, and an answer period is provided at the end of each meeting. This provides a direct two-way communications channel between members and their district director and management. A similar process is used at delegate meetings.

The general manager and finance director meet monthly with the board of directors. Other division heads meet with the board once a year for 2-day planning and budgeting meetings, and also infrequently to supply information on a specific issue.

Delegates meet twice a year, once at the annual meeting and once at informational meetings held at two or three sites. Alternates are encouraged to attend. Breed advisory committee members also attend, broadening participation in the informational meetings. These meetings are chaired by the president of the board. Directors from the appropriate regions are present. At these meetings directors caucus with delegates from their region. This provides an opportunity for two-way communication between directors and delegates.

The breed advisory committee meets with the general manager, genetics staff, and board of directors the day before the annual meeting. The committee as a whole or separate subcommittees meet irregularly as necessary to provide feedback on proposed programs.

An annual meeting is held in each district chaired by the district director. A management team attends each meeting, allowing for an interchange between members. About 25 percent of members attend their district meeting.

Summary In response to a technologically complex and moderately diverse environment, Cooperative G has evolved an operations structure that is divided into vertical levels and horizontal divisions. Many specialized personnel are employed. The stability of its environment has allowed it to standardize many of its procedures. Through a standardized planning and budgeting procedure, the board retains a high degree of control over cooperative operations.

The cooperative has a well-developed membership structure based on geographical divisions. Decisionmaking is decentralized to a delegate body through the resolutions process. An advisory committee, specialized by breed, provides member input for both management and board.

Members and their delegates are regularly informed of cooperative activities and operations through regular newsletters. Both members and delegates are provided opportunities to interact with their regional directors at one meeting annually.

Although Cooperative G has a highly bureaucratic structure, a well-developed member structure, with standardized decision processes, information flows, and interactions provides many mechanisms for member control.

Cooperative H
A Large Marketing Cooperative Manufacturing Processed Products

Cooperative H began as a cheese plant to provide an outlet for member milk supplies. It grew steadily by acquiring other small dairy operations. In addition to acquisitions, the continually increasing productivity of member producers fueled internal growth of the cooperative. The cooperative now operates plants at seven locations.
Table H-1-Size of cooperative H in number of employees, gross sales volume, and number of members, 1960-80

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees</th>
<th>Producer members</th>
<th>Gross sales volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>525</td>
<td>2,526</td>
<td>26.0</td>
</tr>
<tr>
<td>1965</td>
<td>462</td>
<td>3,213</td>
<td>36.5</td>
</tr>
<tr>
<td>1970</td>
<td>466</td>
<td>2,670</td>
<td>55.8</td>
</tr>
<tr>
<td>1975</td>
<td>535</td>
<td>2,482</td>
<td>108.3</td>
</tr>
<tr>
<td>1980</td>
<td>537</td>
<td>2,232</td>
<td>215.0</td>
</tr>
</tbody>
</table>

The growth strategy of Cooperative H since its beginning has been diversification. Diversification has provided multiple markets for member milk and stabilized farm income from a perishable and seasonal product through manufacture of storable products. Today Cooperative H produces bottled milk, cheese, butter, milk powder, and ice cream mix. It has produced under its own branded label since the 1950’s.

Table H-1 summarizes the growth of Cooperative H in numbers of employees and gross sales volume. The reduction in number of members over the years reflects the trend toward fewer and larger dairy farms.

Diversity, Complexity, and Instability The members of Cooperative H are only moderately diverse. Member farm operations are all one type (dairy) and the size range of operations is moderate.

The diversity of operations, on the other hand, is high, stemming from the diversity of its product line and its involvement in both fluid and manufactured markets for dairy products.

Cooperative H’s environment is rated complex by its management personnel. Government regulations require increasingly higher quality standards, requiring sophisticated technologies and testing procedures.

The cooperative operates in a moderately stable environment. Federal milk marketing orders and government purchases of surplus milk products add stability to dairy markets. The marketing flexibility provided by the organization’s diverse product line also contributes to its stability.

Operations Structure Cooperative H has a highly differentiated organizational structure, with five vertical levels and six horizontal divisions based on function. Only minor structural changes have been made in recent years.

Management indicated a high level of standardization within the organization. Jobs are graded into 25 levels and 15 of these have formal job descriptions. The organizational chart indicates a high level of job specialization, with 50 job titles (figure H-1). Among the personnel are a large number of technical experts and professionals.

Altogether, Cooperative H’s operations structure is a text book example of structural response to a complex, diverse, but relatively stable task environment; i.e., a highly differentiated structure with high levels of standardization and specialization.

Membership Structure Cooperative H has a sophisticated membership structure, which has basically been in place since the 1950’s. The membership is divided into 11 districts based on number of members. Districts are subdivided into units for the purpose of electing delegates (figure H-2). One delegate is elected for each 20 members in a unit, and one alternate for each two delegates.

At district meetings, one candidate for director is nominated per district. Directors are elected at large by delegates casting one vote per member they represent. Directors serve 1-year terms, with no limit to the number of terms an individual may serve.

Each district elects a member of the resolutions committee, who also serves as a member of the districting committee. Resolutions prepared by the committee are voted upon by the delegate body. Districting changes are subject to approval by the board of directors.

About 10 years ago a young couples’ group was organized. Three years ago it was split into three regional groups because distance necessitated too much travel time for busy young dairy farmers and hampered the group. Two young couples per district are elected as representatives to serve staggered 3-year terms. The young couple representatives sponsor educational and social events for members, and have limited independent decisionmaking authority within cooperative governance.

The board of directors has specialized subcommittees composed of both directors and staff members. Staff
Figure H-1

Operations Structure of Cooperative H, September 1982

*For the sake of simplicity, individual plant structures are not shown. The structure depicted here is typical.*

Source: Cooperative documents and interviews with cooperative personnel, September 1982
members on board committees do have a vote, but all committee recommendations must be approved by the board. The board elects an executive committee which is empowered to take independent action but must report its action to the full board.

In short, Cooperative H has a highly developed membership structure that assures generous member input into cooperative decisionmaking. It has added vertical levels, divided the membership into horizontal units, and specialized member roles to increase the capacity of the
membership structure to channel and process information from members.

**Decisionmaking, Information Flows, and Interaction** The board of directors of Cooperative H has final authority over capital structure, membership policy, and new enterprise decisions. They make these decisions on the basis of alternatives presented by executive management. Marketing strategies are devised and executed by management. Similarly, the board makes patronage allocation decisions and must approve pricing schedules and policies, including quality premium policies. The board approves all capital purchases over $1,000. Board committees specialized by function are used, but these have no independent authority. All committee recommendations are brought to the full board for approval.

Cooperative H uses standardized reporting procedures to assure adequate flows of information between its members and operations personnel. These include reports of all fieldman visits and standardized quality reports from plant laboratories. Information from field reports includes ‘starts and quits’ (members gained and lost), and comparative pay prices. This information is supplied to the board monthly. Quality reports from the laboratories flow to the member service director and thence to fieldmen and on to individual members. This provides a mechanism to coordinate farm-level production with the needs of processing plants and to assure a high-quality end product. These two reporting procedures illustrate the use of standardized information flows to coordinate the needs of producer members and their cooperative. Both standard reporting procedures involve flows of information vertically through the operations structure and horizontally from the operations structure to the member structure, as shown in figure H-3.

The board receives monthly operating statements disaggregated by department, a monthly balance sheet, and monthly production reports. Board committees receive additional information from executive managers on a regular basis.

All members receive two monthly publications. One contains information about dairy policy and member activities. The second mailing contains information about individual members and employees. In addition, members receive a quarterly balance sheet from cooperative management. All member representatives (delegates and resolution committee) receive additional mailings from management on an irregular basis concerning dairy policy issues and actions. Delegates also get additional financial and operating information from management when they meet.

There is a standardized procedure through which individual members may take a complaint before the full board. The member complaint is first screened by the board’s billing committee. Although this procedure was instituted 2 years ago, no member has yet used it.

There is no formal mechanism by which the board or delegate body reports to the membership.

The general manager, his assistant, and the finance director meet monthly with the board of directors. Top line managers (including the general manager) meet regularly with board committees as full voting members. Individual members receive a visit from their fieldman at least twice a year.

The general membership has two opportunities to meet each year-at the annual district meeting (chaired by the district director) and at fall dinner meetings, where members receive quality and service awards. Nearly 40 percent of members attend these meetings.

Delegates and alternates meet twice a year-at the annual meeting and at summer meetings held in three regional areas. The general manager, his assistant, and the directors of finance and member services regularly attend all district and delegate meetings.

The resolutions committee meets three times each year. They meet before district meetings to review standing resolutions, after district meetings to discuss input from members, and prior to the annual meeting to finalize resolutions for delegate approval.
Young couple representatives meet monthly (by region), and once a year they meet informally with the board. Young couple informational meetings are held early each winter for all young couples. Further, young couples sponsor several social activities each year for all cooperative members.

This past year, the resolutions committee passed a communications resolution requiring each director to meet once each year with the delegates, resolution committee members, and young couple representatives in his district. Although some directors have been doing this already, the act of standardizing this meeting provides another permanent structural mechanism to assure the vertical flow of information in the membership structure.

**Summary** Cooperative H is a dairy cooperative producing diverse products in a complex but relatively stable environment. The membership is dispersed over half a State, but is reasonably uniform. The organization has developed a highly differentiated operations structure and a high level of standardization. Decisionmaking is decentralized horizontally and vertically in the operations structure.

Cooperative H’s membership structure is well developed. Elected delegates, alternates, resolutions committee members, and young couple representatives provide a high representative-to-member ratio and multiple channels for the input of member preferences into cooperative decisionmaking. Member decisionmaking is decentralized vertically through the standardized resolutions process.

The members receive frequent information from their cooperative’s management in the form of quarterly balance sheets and two monthly publications.

Interaction is frequent between the top management and groups of member representatives. Both technical and preference information are thus present at many organizational decision points.

Information tends to flow from management directly to members rather than through the member structure. Flows of member information to management occur through both the operations structure and the membership structure. A newly instituted district meeting between directors and district representatives provides a direct channel for the flow of information vertically through the membership structure.
SUMMARIZATION OF CASE MATERIALS

As the agricultural cooperatives studied in this report have grown through diversification, merger, acquisition and internal growth, they have refined their operations structures. To adapt to increasingly diverse, complex, and unstable conditions in the agricultural economy, they have added vertical levels to their structures, divided their work among horizontal units, employed specialization, decentralized decisionmaking, and standardized reports and procedures to increase the amount of information the organization can process.

Membership structures have evolved more slowly. The most common adaptations to growth and to increasingly uncertain environments have been to specialize the board’s work with functional committees and to adopt an executive committee with the ability to act more quickly and frequently than the full board. In some cases, additional vertical levels have been added: elected delegates or executive committees have been added to attend to some decisionmaking tasks. Other cooperatives have divided their membership into horizontal units for the purposes of voting, thus improving the representation of a diverse membership.

In cases where the membership structure has remained simple while the cooperative has grown, there has been member discontent or an expressed need by management for an increased inflow of information from the membership. In some relatively large cooperatives, however, well-developed membership structures provide multiple mechanisms for member control.

Thus, size does not seem to be the factor which determines the degree to that members control their cooperative. Even large cooperatives may maintain meaningful levels of member input into cooperative governance if membership structures are developed, assuring multiple channels through which members can express their needs and opinions.

There is, however, no single structural design appropriate to all agricultural cooperatives. Cooperative memberships vary in numbers, dispersion, size and types of farm operations, and other features. The operations of an agricultural cooperative may involve the sale of a single product or service, or operations may be diverse. The environment of the cooperative may be stable, allowing many activities to be standardized by rules and procedures, or it may be unstable, requiring ever new decisions impossible to foresee. Similarly, the cooperative’s operations may be simple and easily understood, or complex, requiring specialized personnel. These factors need to be taken into account when designing structures to improve member control of cooperatives.

Case cooperatives included examples of organizations with diverse operations and members, technologically complex operations, and unstable environments. Each of the case cooperatives adapted its operations structures in ways prescribed by organizational theory to adapt to its particular environment. Although organizational design strategies have been much less frequently and consistently applied to membership structures, the trend seems to be toward use of these design principles; i.e., adding vertical levels and horizontal divisions, specializing, standardizing, and decentralizing decisionmaking. In cases where organizational design principles have been applied, they prove both appropriate and effective.

An examination of information flows in the case cooperatives reveals several common patterns of information flow. Within the operations structures of all the case cooperatives, upward vertical flows of information have been standardized, either through the use of standard reports or by computer information systems. There are no similar standardized information collection procedures in the membership structures. Thus, upward flows of information from members to delegates or directors are limited.

Downward vertical flows of information from directors or delegates are, likewise, rare. Instead, information flows from top-level management to members predominate.

Horizontal flows of information from the top levels of management to the board of directors are abundant. In most cases, directors receive much of the standardized information about operations compiled within the cooperative.

Figure 4 below summarizes the formal information flows commonly found in the case cooperatives. This simple diagram illustrates a need for formal mechanisms of communication within the membership structures of agricultural cooperatives.
STRATEGIES FOR DESIGNING EFFECTIVE MEMBERSHIP CONTROL STRUCTURES, WITH EXAMPLES

The following strategies are applications of organizational design principles to the membership structures of agricultural cooperatives. Several important assumptions underlie this approach to improving member control of cooperatives.

1. Size does not preclude effective member control of a cooperative.

2. Member control increases with the number of channels available to members for expressing their needs and opinions within the cooperative governance system.

3. Rationally designed membership structures can improve the efficiency of member control by channeling flows of information to decisionmaking centers in the organization.

4. No single membership structure is appropriate to all agricultural cooperatives. The appropriate structure for a cooperative depends upon the sources of uncertainty it faces (complexity, diversity, and instability).

Designing and Redesigning the Membership Structure

Most agricultural cooperatives adopt a membership structure at the time they initially organize for business. However, as cooperative businesses grow and change, often the membership structure lags the development of the operations structure.

Structure is not forever. It must grow and change in response to growth and change in the cooperative enterprise and in its external environment.

Careful consideration of the design of membership structures is especially crucial when unification procedures are under consideration. Will the unification change the diversity of members? Will the number of members of the combined cooperatives render the current membership structures of the unifying cooperatives inadequate?

Other major changes within the cooperative enterprise...
may also make existing membership structures obsolete. As a cooperative diversifies into new product or service lines it may gain members or patrons who differ from its previous membership. New enterprises may be more complex than the cooperative’s traditional operations, requiring more sophistication on the part of its membership structures.

Likewise, environmental changes may necessitate changes in cooperative membership structures. For instance, urbanization may drastically change a cooperative’s clientele. Existing membership structures may be unable to respond quickly to rapidly changing conditions in a volatile economy. Regulatory requirements may challenge the decisionmaking capabilities of a small, unspecialized membership structure.

The membership structure of an agricultural cooperative should be periodically reevaluated to see if it is performing adequately. One method of assuring a regular review of membership structures is to include it in a long-range planning process. Many member relations problems could be avoided by planning for adequate membership structures rather than redesigning structures only in reaction to member dissent.

Another method for periodically reviewing membership structures is to expand the role of an existing districting committee to consider broader issues of membership structure.

Who Is the Membership?

Effective design of membership structures depends upon an accurate view of the conditions within which the cooperative operates. Therefore, design begins with an assessment of the diversity, complexity, and stability of the cooperative’s environment.

To design effective membership structures, it is critical that cooperatives have accurate information about who their members are. The case studies indicate that agricultural cooperatives often do not have accurate information about who their members are.

Membership information is crucial to design of membership structures because an effective representative system needs to represent the relevant differences between members, the differences that are likely to give them different needs for cooperative goods and services. For instance, part-time farmers, who work at nonfarm jobs during weekdays, may need their supply cooperative to be open for business on weekends, while this may be unimportant to full-time farmers. A cooperative can remain responsive to the needs of its members only if it is aware of what those needs are. Those needs will only be expressed through the organization’s voting structures only if those structures have a base of representation that reflects the differing needs of its members.

One method for developing an information base about member characteristics is to gather more information as part of the procedure for joining the cooperative. A short, simple form can be used to gather data about the characteristics of the new members—the size of member operations, which farm enterprises she/he operates, whether a full-time or part-time farmer, age, location, etc.

Given the current computer capabilities of agricultural cooperatives, this member information can be permanently entered in the system. This procedure would enable the cooperative to analyze changes in services and policies on the patronage of different portions of the membership.

A member survey is another method of gathering membership information. Involving members in implementing the survey can deliver bonuses above and beyond the information collected: increasing member knowledge of the cooperative, creating an opportunity for meaningful participation, and increasing contact among members.3

Choosing a Base of Representation and Horizontally Dividing a Diverse Membership

Membership information provides a factual basis for choosing a basis for representation. If the cooperative’s membership is uniform and all the members live in a local area, it may be unnecessary to divide members into voting units. However, if the membership is diverse, the efficiency with which membership structures reflect member views may be improved by horizontally dividing the members for the purposes of voting and choosing an appropriate base of representation.

Most agricultural cooperatives use geographic location as the base for representative structures. Geographic location is sometimes a good approximation of diversity in

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membership, for similar members may cluster in local areas. Geographic location is also a handy and economical basis for dividing membership. Travel costs may be minimized by localized member meetings; more members may attend if they do not have to travel far from home; and members may be more comfortable speaking out among only their friends and neighbors.

On the other hand, geographic representation may not approximate the relevant differences among members. Elected representatives may fail to reflect the needs of important minority membership segments. The convenience of local meetings may not even stimulate member participation if important issues never see the light of day because dissenting views have no voice in cooperative governance.

One example of a representative structure based on the member’s size of farm is a specialty marketing cooperative that set up its board so all sizes of member operations would be represented. Out of a board of nine producers, two board members are growers with 1-5 acres, two are growers with 5-25 acres, two represent growers with over 25 acres, and three are members-at-large.

Alternative bases of representation bear consideration when designing membership structures. Cooperatives with multiple levels of representation may, of course, use differing bases for differing representational structures. For instance, delegates could be elected by geographic district while resolutions committee members are elected by farm type, farm size, age, or other relevant member characteristic. The widespread use of computer technology among agricultural cooperatives makes multiple bases of representation more feasible and economic than it was in the past. Computer capability makes it possible to combine the convenience of localized member meetings with the benefits of other bases of representation.

Another recent technological development has great possibilities for breaking the hold of geographic location as a base for representative structures. Electronic communications technologies such as teleconferencing greatly reduce the cost of meetings by allowing interaction between participants at separate locations. As two-way electronic communications and visual techniques are developed and refined, geographic proximity can cease to be the overriding consideration in dividing the membership. Electronic teleconferencing is being used by several large cooperatives, and they have reported member satisfaction with this technique.

What Is the Cooperative’s Environment?

Two other important contingencies for the design of cooperative membership structures are the degree of complexity and instability of the cooperative’s environment. These two variables affect the number of decisions member representatives must make and the amount of flexibility there must be in the decisionmaking system so the cooperative can respond to its business environment in a timely fashion.

Neither of these concepts is, unfortunately, amenable to precise measurement. Several indicators may, however, serve as a rough gauge of these variables.

One indicator of complexity is the number of trained professionals hired by the cooperative to carry out its operations. Other items to take into account in determining the complexity of the cooperative’s operations are: 1) the number of markets the cooperative sells in; 2) the number of cooperative operating facilities; and 3) the technological sophistication of the cooperative’s operations.

Similarly, to determine whether the cooperative’s environment is stable or unstable, one might consider: 1) the extent to which price varies in both the input and output markets the cooperative faces; 2) the regularity of the cooperative’s sales levels over the last few years; 3) the rate of change in standard economic indicators like inflation, unemployment, and interest rates; and 4) the extent to which the cooperative is vulnerable to changes in government policies and programs.

Strategies for Complex Cooperatives: Specialization and Training

One strategy for increasing member control of complex cooperative operations is specialization. Specialization increases the expertise of members in dealing with the multitude of decisions a cooperative business must make. It may be unrealistic to expect a volunteer representative, constrained by the demands of running his/her own farm enterprise, to be knowledgeable about all aspects of a complex cooperative’s operations. Nevertheless, a member representative can become reasonably expert in one aspect of the cooperative’s business, be it employee benefits, transportation systems, or product marketing. Thus, specialization can maximize the effectiveness of an individual representative’s contribution to cooperative governance.
The case studies illustrate the most common application of specialization in agriculture cooperative structures: the use of specialized committee structures by cooperative boards of directors.

Another method of specializing member input to cooperative governance is the use of member advisory committees or task forces to address a specific issue. The efficacy of such a practice is illustrated by the example of a rural electric cooperative that was experiencing member dissent over increased service rates. A rate review committee of members representing different types of users was selected from volunteers and supplied with specialized information pertinent to the decision. The rate review committee proved to be capable of understanding the complexities of the decision and concluded that the rate hike was indeed necessary. Their decision was subsequently approved by a large margin in a referendum of the members. If members are capable of understanding complex rate decisions, they are capable of handling many of the complex decisions of modern agricultural cooperatives as well.

Another strategy for maintaining member control of complex cooperatives, similar to specialization, is training for specific tasks and duties. As traditional businesses grow complex, they hire increasing numbers of trained professionals to perform specialized tasks. Training increases the ability of specialists to process specific kinds of information efficiently. Similarly, as cooperative’s operations become complex, the efficiency and effectiveness of member representatives can be improved through training for specific tasks. Given the financial losses that may accrue from poor decision, training for member representatives is an important investment in human resources with potentially large pay-offs. Opportunities for training may also motivate member participation.

**Strategies for Complex Cooperatives: Adding Vertical Levels**

Adding vertical levels to the membership structure of a cooperative improves the efficiency of decisionmaking in two ways. For one thing, it limits the number of decisions any one individual or group must make. The second effect of adding vertical levels is to increase the number of individuals with decisionmaking roles, increasing the organization’s capacity to process information. Adding vertical levels also increases the representative/member ratio, multiplying the number of opportunities for members to express their preferences in the decisionmaking process.

Delegate systems are one way to add an additional vertical level to the cooperative membership structure. Decisions that are otherwise a privilege of the general membership, such as selecting directors and approving resolutions, can be delegated to these elected representatives.

Other examples of added vertical levels in membership structures are elected resolutions committees; local, division, or district boards; and an executive committee that has the authority to act independently on specific issues.

**Strategies for Complex Cooperatives: Decentralization**

Decentralization of decisionmaking is the assignment of rights and responsibilities for making specific organizational decisions to individuals not at the top of the organization.

As seen in the case studies, agricultural cooperatives have been slow to decentralize decisionmaking within the membership structure. Nevertheless, decentralization is a valuable tool for increasing the number of decisions member representatives can make by sharing the decisionmaking tasks among a larger pool of members. A complex cooperative that relies solely on a small board of directors to make all policy decisions runs two risks: either the board will delegate to management many decisions of high consequence to members because it does not have time to consider them all; or the board may make hasty and ill-informed decisions because it does not have time to carefully consider all the decisions it takes on.

A common example of decentralization in agricultural cooperatives is federation. Much of the previous debate on cooperative structure has been limited to the pros and cons of centralized versus federated (i.e., decentralized) cooperatives, where independent local cooperatives retain most authority over local operations. This model is, perhaps, too simplistic and has limited consideration of other applications of decentralization. Organizational theorists warn that centralization and decentralization should be treated not as absolutes, but rather as two ends of a continuum.

Indeed, the use of delegate systems and division boards illustrates a degree of decentralization somewhere between the extremes of centralization and decentralization. Another example of limited delegation of authority is
allocating a budget to a young couple’s group and, within the bounds of a board-approved mission statement, allowing that group to make its own decisions about how to use those resources. Additionally, the board of directors of a cooperative can decentralize particular decisions to board committees, constrained by guidelines set by the board. Decentralizing routine monitoring of operations to committees allows the board to focus on important strategic and policy issues.

Decentralization of decisionmaking to subgroups of member representatives need not result in confusion over the boundaries of authority of different groups of member representatives, just as it does not normally lead to questions of authority within operations structures. Confusion can be avoided by the use of formal written job descriptions that include clear statements of the authority associated with the position and the limits of that authority. It is essential, when using decentralization as a strategy for handling complexity, to make a clear distinction between member groups who are purely advisory and those that have decisionmaking authority.

**Strategy for Handling Unstable Environments: Vertical Information Systems**

Unstable (that is, rapidly changing and unpredictable) environments present a major challenge for member control. For an organization to compete effectively in an unstable environment, it must be able to make decisions and take action quickly. In such an environment, highly standardized procedures for member decisionmaking may place the cooperative at a competitive disadvantage.

In an unstable environment, design strategies focus on the cooperative’s information system.

In an unstable environment, there may not be the time to invoke widespread member input through the regularly scheduled series of membership meetings. What is needed is a more frequent flow of information about member preferences, an approximation of the sophisticated computerized information system utilized in the operations structure.

One way to gain a more constant influx of information about member preferences is by using a survey panel—a group of representative members frequently surveyed to ascertain needs and opinions on specific questions. Incentives are given to cooperative panel members to encourage their participation. Some cooperatives have reported excellent response to this technique. If the cooperative’s members reside within a localized area, a telephone survey of a panel of members can be implemented quickly and at little cost.

Some cooperatives use delegates or an advisory committee as a sounding board to gauge member opinions quickly. Of course, the validity of the opinions of such groups is enhanced if they have been elected by the membership on a basis that truly represents the diversity of member opinions on relevant issues. Further, the use of conference calls can reduce both the time and the expense of gathering member input when decisions must be made quickly.

**Strategy for Handling Dynamic Environments: Lateral Relations**

In an unstable environment, decisions will arise that cannot be foreseen or planned for. Thus, appropriate membership structures cannot be provided beforehand that will provide the relevant mix of skills, information, or authority to make the decision quickly.

One method of handling such situations is to use lateral relations. Lateral relations facilitate decisionmaking without creating new structures. Three examples of lateral relations are hearings, liaison roles, and ad hoc committees or task forces.

Hearings, a common feature of the U.S. governmental process, have only occasionally been used by agricultural cooperatives. A hearing can supplement regularly scheduled member meetings as a forum to gather member input on a specific issue or decision. Hearings can be used by agricultural cooperatives in unstable environments as a flexible method of member participation that provides efficient input focused on specific decisions. In addition, hearings bring members concerned with a specific decision into direct communication with decisionmakers, saving time by isolating conflict that might otherwise unnecessarily involve the entire membership.

Liaison roles can be used to link two or more membership groups that find they must make decisions that cut across their separate jurisdictions, but still do not affect the entire membership. A member in each of these groups may be appointed as the liaison, and the liaisons can serve to coordinate communications and decisions between the separate groups. Liaison roles allow decisions cutting across subgroup boundaries to remain decentralized, saving the time of referring the decision upward to the board of directors.
A final example of lateral relations is the use of a member task force or ad hoc committee. As in the case of hearings, the ad hoc committee allows specific skills and information to be focused on a specific decision. For instance, consider a cooperative that needs a new credit policy because receivables have become a financial drain on the cooperative’s resources. An ad hoc committee could be formed to decide what kind of policy would be most effective both financially and in terms of member needs, allowing both concerns to be addressed quickly.

Encouraging Horizontal Information Flows with Horizontal Structures

A central problem of designing effective membership structures is to assure that member input is directed to points in the operations structure where decisions of consequence to members are made. The case studies illustrate that such decisions are made at several points in the operations structure, thus requiring an adequate mix of information from both the operations and membership structures at points below the apex of organization’s structure.

Organizational communications theory indicates that: 1) information is likely to be distorted as it flows through vertical levels of an organization and 2) horizontal flows are most frequent in organizations. Some examples of horizontal flows are the frequent formal flows of information between directors and the general manager and frequent informal flows of information between members and personnel at the base of cooperative organizations. Therefore, one method of assuring directed flows of relevant information between membership structures and operational structures is by designing matched membership and operations structures.

One illustration of this principle in action in some agricultural cooperatives is the formal interaction of board committees with managers in the top line of the operations hierarchy. For instance, the controller or finance manager may meet regularly with the finance committee of the board, assuring that the membership body responsible for financial decisions has relevant technical information from the operations structure. The standardization of this interaction may vary in degree from regular attendance of a top-line manager, to nonvoting participation of the manager on the committee, to full voting status as a member of the committee.

Another application is the use of branch or retail store advisory committees who meet regularly with the managers of the local operations. A third use of a horizontal structure is the use of a specialized member advisory committee that meets with a staff member responsible for a particular aspect of the cooperative’s operations.

A full-blown example of the use of horizontal membership and operations structures is provided by a large agricultural cooperative in Great Britain. As illustrated in figure 5, this cooperative has both a main group board and division boards that are composed of equal numbers of member representatives and management personnel. In addition, regional committees meet four times a year with management from their local branches. These division boards have a degree of independence in developing budgets and are primarily responsible for formulating market strategies in their own commodity areas. The main group board is responsible for formulating and implementing policy. All major policy changes have to be approved by the management committee, made up entirely of members. Thus, this structural design illustrates not only matched membership and operations structures, but vertical levels, horizontal divisions, specialization, and decentralization applied to the membership structure of a large, diverse, and complex agricultural cooperative.

Improving Vertical Information Flows in the Membership Structure

The case studies show that most information flows from the apex of the operations structure to all levels of the membership structure. Information flows among levels in the membership structure are limited to informal flows or infrequent formal meetings of the membership. Both standard procedures and permanent structural arrangements can improve the flow of information within the membership structure.

The use of standardized complaint procedures can be used to ensure an undistorted flow of information from the general membership to the board of directors. Flows of negative information upward through an operations hierarchy tend to be limited because of disincentives for revealing poor performance. A standardized complaint procedure giving a member access to the board as a last resort can ensure that serious problems at the base of the cooperative do not go unnoticed.

Another procedure for assuring member access to the board, or any other member representative body, is an open-meeting policy. Such a policy expands the frequency with which members may interact with member...
Figure 5
Membership Structure of a Large Agricultural Supply Cooperative
representatives and prevents distortion of information flows between members and representatives.

The use of a regular member survey or survey panel is once again applicable in this context.

The cooperative’s member newsletter is a device that could be more frequently used for communication among members. Individual directors or board committees can take turns at writing a column for the member newsletter. A regular member question-and-answer section in the newsletter, which includes a postage-paid return question card in its issues, has been successfully used by one large dairy cooperative. Such questions can be answered by either management or directors.

A structural approach to improving information flows from directors to members is used by a large Canadian grain cooperative. As shown in figure 6, the manager of the agricultural policy and member relations division reports directly to the board of directors rather than to the general manager. Such an arrangement substantially changes the flow of information vertically from the board of directors to members and has significant consequences for the balance of power between board and management.

**Parting Note**

The above strategies provide a few examples of ways in which design strategies from organizational theory can be applied to the membership structures of agricultural cooperatives. These examples, these applications of principles, are by no means exhaustive.

The structural needs of agricultural cooperatives vary greatly with the size of the business, the environmental situation of the organization and, doubtlessly, with a multitude of more subtle factors such as attitudes, values, culture, and style. There is no one structure suitable to all agricultural cooperatives.

Some of the design examples will find ready acceptance,
and others may evoke disapproval and disagreement among those who read them. The intent of this report is not to recommend any of these methods, but to provide a thought-provoking variety of applications of organizational theory.

It is hoped that these guidelines and examples will stimulate innovative approaches to designing membership structures. The proliferation of many structural alternatives would greatly broaden the number of models to draw from in designing effective structures to improve membership structures.
Agricultural Cooperative Service (ACS) provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

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

ACS publishes research and educational materials and issues Farmer Cooperatives magazine. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, age, handicap, or national origin.