

United States Department of Agriculture

Rural Development

Rural Business-Cooperative Service

RBS Research Report 156

# Voting and Representation Systems in Agricultural Cooperatives



### **Abstract**

This report documents the extent of use of one-member, one-vote and proportional voting systems in the U.S. by type and function, and membership size for direct-membership, federated, and mixed membership cooperatives. It also documents the extent of use of at-large, geographic districting, and delegate systems, **as** well as combinations of at-large with districting and delegate systems by type and function and by region. The report finds one-member, one-vote, and at-large systems predominate.

**Keywords:** cooperatives, membership, voting, proportional representation, governance.

## Voting and Representation Systems in Agricultural Cooperatives

RBS Research Report 156

Bruce J. Reynolds, Thomas W. Gray, Charles A. Kraenzle

Rural Business-Cooperative Service

June 1997

Price: Domestic \$5.00; foreign \$5.50

### **Preface**

Fundamentally, a cooperative is its members. But this type of membership organization must have the power to make decisions as a unified and single entity. Cooperatives follow democratic principles for determining and delegating the powers of governance and decision-making authority. Members elect **a** board of directors to assume a dual responsibility of representing member interests and executing fiduciary responsibilities of control. Directors carry out these responsibilities primarily in periodic board meetings with management.

This report examines the two interrelated aspects of cooperative representation: 1) determining voting power of individual members, and 2) determining how directors are to be elected to cooperative boards.

Data for this study were collected from a survey of U.S. farmer cooperatives that use various voting and representation systems. These data were sorted by region, type or function, membership size, and by organizational structure, i.e, direct membership, federated, and mixed membership cooperatives.

Specifically, the survey was developed to measure the prevalence of: **1)** voting power either as one-member, one-vote or as proportional voting systems, and **2)** director election methods, as based in at-large, geographic districting, and delegate systems, or some combination of these alternatives.

Data were collected in Cooperative Services' **1995** annual survey of farmer cooperatives. About **74** percent of U.S. farmer cooperatives were asked to provide information on their voting/representation systems.

### **Contents**

| HIGHLIGHTS iii                     |
|------------------------------------|
| INTRODUCTION1                      |
| Individual Voting Power1           |
| Delegation and Representation1     |
| Survey Design and Response         |
| DIRECT-MEMBERSHIP COOPERATIVES3    |
| Voting Method                      |
| Representation Systems4            |
| FEDERATED AND MIXED COOPERATIVES8  |
| Voting Method                      |
| Representation Systems             |
| SUMMARY AND CONCLUSIONS            |
| APPENDIX - STATE STATUTES AND LAWS |
| GLOSSARY                           |
| REFERENCES                         |

### **Highlights**

A survey of voting methods for electing members to boards of directors of cooperatives was conducted in 1995. Results are reported separately for 1,340 direct-membership cooperatives and **63** federated and mixed organizational structure cooperatives. Respondents indicated whether their election procedures were by one-member, **one-**vote or by proportional voting. Respondents were also asked to indicate their method of defining elected representation from a list with five different ways: at-large, districts, delegates, at-large and districts, and lastly, at-large and delegates.

Survey results are reported by cooperative type or function, by membership size intervals, and some results are reported for geographic locations.

### **Direct-Membership Cooperatives:**

Direct-membership cooperatives are organized so farmers or ranchers, as producers, make up the membership of the organization. A survey of cooperatives provided the following:

- Ninety-three percent of all direct-membership cooperatives used one-member, **one**vote methods, while the remaining 7 percent used proportional voting methods.
- Several States have, or had, statutes or corporate laws that require a one-member, one-vote system for organizations to incorporate as cooperatives. Therefore, the comparative frequency in which either voting method is used is influenced, and in many States, determined by these statutes. Some of the survey results are grouped and reported for States with statutes that do not require one-member, one-vote.
- The one-member, one-vote method was used in the greatest percentage by **direct**-membership cooperatives in the Great Plains.
- Proportional voting was used in the greatest percentages by direct-membership cooperatives in Illinois and California.
- Cotton and dairy cooperatives used the one-member, one-vote method in the greatest percentage.
- Fruit and vegetable and nut cooperatives used proportional voting in the greatest percentages.
- Direct-membership cooperatives with proportional voting have slightly smaller membership sizes than those that use one-member, one-vote systems. However, this pattern was not evident among the largest sized cooperatives.
- Sixty-six percent of all direct-membership cooperatives used at-large elections of cooperative directors.
- Twenty-three percent of all direct-membership cooperatives used geographic districting for apportioning elected seats to their boards of directors.
- Northeast and Great Plains cooperatives elected directors at-large in the greatest percentages. Intermountain, North Central, and Pacific region cooperatives used atlarge methods in the smallest percentages.

- Pacific and North Central region cooperatives used geographic districting in the greatest percentages. Great Plains and Southeast cooperatives used geographic districting in the smallest percentages.
- At-large elections predominated among localized and relatively small membership cooperatives. Cotton ginning cooperatives used at-large methods in the greatest percentages.
- Geographic districting, delegate systems, and combined at-large districting and atlarge and delegate systems were mostly used in large-membership cooperatives.
- Combined at-large and geographic districting systems were used more frequently than delegate and combined at-large/delegate systems.

### Federated and Mixed-Membership Cooperatives:

Federated cooperatives are organized to have only other cooperatives as members. Mixed-membership cooperatives have both cooperative organizations and individual farmers as members. A survey of cooperatives showed:

- Twenty-seven of **31** federated cooperatives use one-member, one-vote.
- Twenty-four of 29 mixed cooperatives use one-member, one-vote.
- Fifty-one of **61** federated and mixed cooperatives use one-member, one-vote.
- Nine of **25** federated cooperatives exclusively hold at-large elections, while **16** use some form of district or unit apportionment.
- Of the 21 mixed cooperatives, 9 exclusively have at-large elections, and 9 use exclusively geographic districts.

# Voting and Representation Systems in Agricultural Cooperatives

Bruce J. Reynolds, Thomas W. Gray, Charles A. Kraenzle (USDA, RBS-Cooperative Services)

### Introduction

The operations and services of agricultural cooperatives are similar to those of many businesses, but cooperatives are distinctive in being owned and controlled by their members. All formal power within cooperatives derives from the membership body, and not from individual members, elected officers, hired management, or employees. While the distribution of this power may get skewed in various ways, fundamentally the cooperative is the membership body. (Ginder and Dieter, 1989; and Craig, 1993.)

Cooperative governance is created by a democratic system of representation. It involves two interrelated components: 1) member voting for directors to a limited number of seats on a governing board, and 2) defining the representation relationship of each elected director to the membership. These two aspects of democratic representation are conducted by cooperatives in different ways. Most cooperatives establish voting power on a one-member, one-vote basis. The alternative method is proportional voting, where members are granted votes according to the number of their patronage equity shares.

Cooperatives also use different methods of determining the representation relationship for electing members to seats on the board. The major methods are election of directors at-large, by geographic districts, by district delegates, or by some combination of these techniques.

### **Individual Voting Power**

Cooperatives must determine the amount of voting power to be vested in each member. This power can either be distributed on an equal basis as onemember, one-vote, or allocated to members on a proportional basis.

In proportional voting systems, each member has at least one vote, but can accumulate additional voting power, often carried to fractional values, in proportion to patronage volume or patronage-generated equity, or invested shares of stock in the cooperative. Some **organiza** tions limit voting power to a specific number of votes per member, but all members have at least one vote.

Rationales for these two voting methods vary, and have been a subject of debate for decades. A few are mentioned.

The accepted practice of democratic government in the United States is for each citizen to have an equal vote in elections for political representation. Cooperatives have traditionally subscribed to this equality norm by electing directors on the basis of onemember, one-vote. The overriding idea is that all members cooperate as equals and are governing their organizations on a consensus basis.

Advocates of proportional voting understand fairness and equity in terms of use of the organization. For these members, it is understood that those using the organization in the greatest volumes should also have the greatest governing control. The more a **producer**-member uses the organization, the more votes he or she should have in its governance. This logic may be most frequently used where the volume of products marketed or services used are highly concentrated in a numerical minority of members.

### **Delegation and Representation**

In cooperatives with small memberships, decision-making can potentially be made in a town-meeting type of forum. However, the practicality of such forums is quickly limited by membership size and complexity in decision-making. The larger the membership body, the slower and more limited the number of decisions that can be made in a reasonable period of time (How long members will remain meaningfully active at a meeting?) Power to make decisions must be delegated to a governing body, such as the board of directors. The extent of and limits to this power are generally specified in cooperative bylaws and other legal instruments. Some cooperatives require member-

ship to ratify major decisions. When major proposals are supported by only a slight majority of directors, decisions are then frequently made by taking a membership vote.

When the membership elects directors to the board, they delegate power to them to make decisions in the interest of the collective group. When an individual member casts his or her vote, he or she agrees to abide by the election outcome. Decision-making power is shifted from the membership body to the board. An election lends legitimacy to this shift or delegation of power.

Individual members have varying degrees of access to the process of nominating and electing members to the board. The different methods of nomination that can be used were not covered in the survey. Nominating committees are frequently organized along the same avenues as the election of directors. The survey, however, did cover the three major avenues of election.

### 1) Electing directors by geographic districts:

Some cooperatives, particularly those with large numbers of members, divide their membership into geographic districts. Members in these districts elect directors to represent them on the board. In general, members vote only for directors nominated from their respective districts. Directors are typically elected at annual district meetings.

### 2) Electing directors at-large:

Other cooperatives may elect directors on an "at-large" basis. A board is elected at an annual meeting from, and by, the entire membership, regardless of districts or geographic locations. Cooperatives that use geographic districting may designate one or two seats on the board to be elected at-large.

### 3) Electing directors by delegates:

Still other cooperatives provide for the election of directors by delegates. Individual members elect delegates from geographic districts, rather than directly electing directors to the board. These delegates are typically elected at respective annual district meetings. Delegates, acting for the entire membership body, elect a board of directors at an annual meeting.

A small number of case studies have been done on governance structures. (Schomisch and Mirowsky, 1981; Butler, 1988; Gray, 1988; Gray and Butler, 1991; and 1995.) A survey of voting by cooperatives was conducted for a study in 1979. (Ward, Schneider, and Lopez, 1979.)

These works outline the different structures of representation within the United States, but no previous studies have been made of the prevalence of these options. This report samples for the prevalence of these representation options within the United States by region, cooperative type or function, and membership size.

### **Survey Design and Response**

Data for the study were collected using Cooperative Services' annual survey of farmer cooperatives. Two questions were asked about voting methods. The first question asked if the cooperative used one-member, one-vote or proportional voting in its member-voting methods. The second asked if directors were elected at-large, by geographic districts and/or divisions, or by district delegates.

The questionnaire requested voting information related to the operation of each cooperative during fiscal 1995. Results are reported for respondents from direct membership, federated, and mixed-structure agricultural cooperatives. Direct-membership cooperatives are organized so that farmers or ranchers, as producers, make up the membership of the organization. Federated cooperatives have other cooperatives as their members. Mixed agricultural cooperatives have both cooperatives and individual farmers as members.

Table - Number of cooperatives surveyed and response to questions on voting, 1995

|                                | Number of  | Number of Cooperatives                       |         |  |  |  |  |  |
|--------------------------------|------------|--|---------|--|--|--|--|--|
| Cooperative type or function   | Surveyed 1 | Surveyed <sup>1</sup> Responded <sup>2</sup> |         |  |  |  |  |  |
|                                | /          | Number                                       | Percent |  |  |  |  |  |
| Cotton                         | 15         | 12   | 80.0    |  |  |  |  |  |
| Dairy                          | 174        | 84   | 48.3    |  |  |  |  |  |
| Fruit and vegetable            | 283        | 95   | 33.6    |  |  |  |  |  |
| Grain and oilseed <sup>3</sup> | 928        | 447  | 48.2    |  |  |  |  |  |
| Livestock                      | 77         | 24   | 31.2    |  |  |  |  |  |
| Poultry 4                      | 17         | 10   | 58.8    |  |  |  |  |  |
| Nut                            | 19         | 10   | 52.6    |  |  |  |  |  |
| Other marketing 5              | 85         | 33   | 38.8    |  |  |  |  |  |
| Farm supply                    | 1,118      | 568  | 50.8    |  |  |  |  |  |
| Cotton gin                     | 145        | 68   | 46.9    |  |  |  |  |  |
| Other service                  | 88         | 52   | 59.1    |  |  |  |  |  |
|                                |            |  |         |  |  |  |  |  |
| Total                          | 2,949      | 1,403  | 47.6    |  |  |  |  |  |

- Number of cooperatives queried about voting and representation methods.
- <sup>2</sup> Used either one-member, one-vote or proportional voting.
- <sup>3</sup> Excludes cottonseed.
- 4 Includes poultry, eggs, turkeys, squab, and ratite cooperatives.
- 5 Includes dry bean, rice, sugar, fish, wool, and miscellaneous marketing cooperatives.

About 74 percent (or 2,949) of U.S. farmer cooperatives were asked to provide information on their voting methods and about half responded. The remaining 26 percent — fishery, wool and mohair, tobacco, and other selected cooperatives — were polled but not on the voting issue.

Response rates by cooperative type or function are reported in table 1. Questionnaires were sent to 1,118 farm supply cooperatives, the largest type to be surveyed, of which 568 or 51 percent responded. Grain and oilseed cooperatives (grain) were the second largest group (928) surveyed. More than 48 percent or 447 provided information.

### **Direct-Membership Cooperatives**

### **Voting Method**

Some State statutes for cooperative incorporation require a one-member, one-vote system. Some of the effects of State statutes and securities laws on voting methods are discussed in the Appendix.

The overall results of the survey show the prevalence of the two methods of voting. However, to compare preferences between one-member, one-vote versus proportional voting, a data set for States that allow both methods of voting is provided.

### Comparison Set of Direct-Member Cooperatives:

By excluding States that require incorporation as **one**-member, one-vote from the data set, the percentage of direct-membership cooperatives using proportional voting is much higher than the nationwide aggregate. A comparison set of 18 States provides 439 responses-353 used one-member, one-vote, and 86 used proportional voting (table 2).

In the formation of most cooperatives, a **one**-member, one-vote system is the traditional assumption. Where both voting methods have been permitted, the survey results show nearly 20 percent use proportional voting. However, these results do not adequately indicate a preference for proportional voting. In the set of 18 States with both methods of voting permitted, 9 States had no cooperatives reporting use of proportional voting. Furthermore, 54 of the 87 cooperatives reporting proportional voting are from Illinois.

The relatively high incidence of proportional voting in Illinois reflects a historical background of specific regulations (see Appendix). By removing Illinois from the comparison, proportional voting is 9.1 percent of the total. Where both voting methods are allowed in State statutes, the 9 percent figure is a more

accurate indication of proportional voting frequency than the nearly 20 percent when Illinois is included. It is also relatively close to the nationwide result of 6.8 percent reporting use of proportional voting (table 2).

### Cooperatives by Type or Function:

Circumstances that prompt a departure from **one**-member, one-vote procedures may be related to the type of cooperative. These results and all subsequent reporting for direct-membership cooperatives are based on responses from 1,340 cooperatives. Of the 1,340 direct-membership cooperatives responding to the survey, 1,249 or 93.2 percent use a one-member, one-vote election method. The remaining 6.8 percent (91) used proportional voting. A survey in 1978 reported similar results. (Ward, et al, 1979.)

Fruit and vegetable and nut cooperatives used proportional voting more than other types of cooperatives (table 3). Of the 88 reporting fruit and vegetable. cooperatives, 22 of them or 25 percent, used proportional voting, as did 3 of 10 reporting nut cooperatives.

Table 2— Voting method of direct-membership cooperatives by States with statutes allowing both one-member, one-vote and proportional voting

| State            | One-member<br>One-vote | r, Proportio<br>voting | nal Total | Proportional method |
|------------------|------------------------|------------------------|-----------|---------------------|
|                  |                        | Number -               |           | Percent             |
| Alabama          | 15                     |                        | 15        |                     |
| Arizona          | 3                      |                        | 3         | -                   |
| California       | 50                     | 19                     | 69        | 27.5                |
| Florida          | 11                     | 2                      | 13        | 15.4                |
| Hawaii           | 6                      |                        | 6         |                     |
| Illinois         | 33                     | 54                     | 87        | 62. 1               |
| Indiana          | 26                     |                        | 26        |                     |
| Maine            | 3                      |                        | 3         |                     |
| Massachusetts    | 5                      | 1                      | 6         | 16.7                |
| Michigan         | 22                     | 3                      | 25        | 12.0                |
| Nebraska         | 66                     | 1                      | 67        | 1.5                 |
| New Jersey       | 10                     | _                      | 10        | _                   |
| New Mexico       | 2                      |                        | 2         |                     |
| New York         | 22                     | 1                      | 23        | 4.3                 |
| Ohio             | 35                     |                        | 35        |                     |
| Oregon           | 13                     | 4                      | 17        | 23.5                |
| Vermont          | 2                      | -                      | 2         |                     |
| Washington       | 29                     | 1                      | 30        | 3. 3                |
| Total            | 353                    | 86                     | 439       | 19. 6               |
| Without Illinois | 320                    | 32                     | 352       | 9. 1                |
| All States       | 1, 249                 | 91                     | 1, 340    | 6. 8                |

<sup>- =</sup> None responded.

Grain cooperatives, 41 of 442 or 9 percent, were the most numerous users of proportional voting and all 41 were in Illinois.

The other groupings of cooperatives by type predominantly used the one-member, one-vote method (table 3). Only 1 of 74 dairy cooperatives reporting used proportional voting, as did only 16 of 550 farm supply cooperatives. If Illinois cooperatives are excluded, less than 1 percent of farm supply cooperatives used proportional voting. However, use of proportional voting is significant among California fruit, vegetable, and nut cooperatives.

Cooperative size (membership) does not appear to influence voting method. Table 4 shows seven intervals of membership size for 1,340 direct-membership cooperatives, including a separate column for the 91 cooperatives with proportional voting. All seven intervals reported at least one cooperative using proportional voting. Because the number of cooperatives in each interval varies widely, proportional voting is also reported as a percent of each interval.

### Summary:

**Of** the 1,340 direct-membership cooperatives in the study, 93 percent used a one-member, one-vote election method. It is used by a majority of cooperatives in all States except Illinois.

When considering only States with incorporation statutes that allow both voting methods and do not restrict the adoption of either method, the frequency of proportional voting is only slightly higher than the national results. So, even given a choice, most cooperatives favor the one-member, one-vote system.

**Proportional voting was used most by the fruit, vegetable, and** nut cooperatives operating in California, or by local grain and farm supply cooperatives in Illinois. Membership size does not appear to influence decisions about choice of voting methods.

### **Representation Systems**

Of the 1,268 direct-membership cooperatives that responded to survey questions on representation, 832 or 65.6 percent exclusively used at-large election methods for choosing directors (table 5). Elections based on

Table 4— Percent of direct-membership cooperatives using proportional voting, grouped by membership size intervals, 1995

| Membership size intervals | co-ops | Proportional<br>Voting | Percent of interval |  |
|---------------------------|--------|------------------------|---------------------|--|
|                           | N      | umber                  | Percent             |  |
| Less than 100             | 185    | 17                     | 9.2                 |  |
| 100-249                   | 208    | 17                     | 8.2                 |  |
| 250-499                   | 317    | 13                     | 4.1                 |  |
| 500-999                   | 307    | 17                     | 5.5                 |  |
| 1 ,000-2,499              | 229    | 19                     | 8.3                 |  |
| 2,500.4,999               | 60     | 7                      | 11. 7               |  |
| <b>5,000 or</b> more      | 34     | 1                      | 2. 9                |  |
| Total                     | 1, 340 | 91                     | 6. 8                |  |

Table 3-Voting methods used by direct-membership cooperatives, by type, 1995

| Cooperative type/ function     | One-me | ,            | •      | ortional<br>ting | Total  |
|--------------------------------|--------|--------------|--------|------------------|--------|
|                                | Number | Percent 1    | Number | Percent 1        | Number |
| Cotton                         | 5      | 100. 0       |        | -                | 5      |
| Dairy                          | 73     | 98. 6        | 1      | 1.4              | 74     |
| Fruit and vegetable            | 66     | 75.0         | 22     | 25.0             | 88     |
| Grain and oilseed <sup>2</sup> | 401    | 90.7         | 41     | 9.3              | 442    |
| Livestock                      | 22     | <b>95.</b> 7 | 1      | 4. 3             | 23     |
| Poultry <sup>3</sup>           | 10     | 100.0        | -      |                  | 10     |
| Nut                            | 7      | 70. 0        | 3      | 30. 0            | 10     |
| Other marketing 4              | 29     | 90. 6        | 3      | 9. 4             | 32     |
| Farm supply                    | 534    | 96.7         | 16     | 3.3              | 550    |
| Cotton gin                     | 63     | 96.9         | 2      | 3.1              | 65     |
| Other service                  | 39     | 95.1         | 2      | 4.9              | 41     |
| Total                          | 1, 249 | 93. 2        | 91     | 6.8              | 1, 340 |

- <sup>1</sup> Percent of cooperatives in each type using the voting method.
- <sup>2</sup> Excludes cottonseed.
- 3 Includes cooperatives marketing poultry and eggs, turkey, squab, and ratite.
- 4 Includes dry bean, rice, sugar, and miscellaneous marketing cooperatives.

geographic districts were reported by 286 or 22.6 percent. Only 22 cooperatives or 1.7 percent used a delegate system. Nearly 10 percent (122) used some combination of geographic districts and at-large elections. Only six cooperatives used some combination of **at-**large and district delegates for electing directors.

### Representation Systems by Membership Size:

Table 5 compares the frequency of responses for different representation systems by seven intervals or classifications of membership size. More than half are in the smallest three intervals of membership size. In the two largest intervals, covering all responses by cooperatives having at least 2,500 members, there were only 83 cooperatives out of 1,268.

Although most respondents used at-large representation, an increasing number used districting and delegate systems with large memberships.

### Across Representation Systems:

*In* the first four ranges of membership size, a majority used the at-large representation (table 5). The greatest percentage was in the smallest membership range. With each larger membership size interval, the percent of cooperatives that used at-large representation rapidly declines until leveling off at about 30 percent in the largest two membership groupings.

Geographic district systems were more prevalent in the middle range of membership size (500-999), reaching 28.1 percent. It is the most frequent method used in the largest two intervals. Representation systems that combine at-large and geographic districts or

service divisions also become relatively more prevalent in terms of the percent share of the membership size intervals from the middle to the largest. In the 2,500 to 4,999 range, 13 of 57 cooperatives (22.8 percent) used a combination of at-large and districts or divisions.

Relatively few respondents used delegate systems in all membership size intervals. Results show there is also relatively less inclusion of at-large seats in district delegate systems than in those using geographic districts or divisions for member voting.

### Within Representation Systems:

Table 6 focuses on the membership size distribution within each system. Cumulative percentages are given by size intervals for each system.

There were 832 respondents exclusively using atlarge elections. Nearly 65 percent were in the smallest three membership-size intervals. The four systems of districting are mostly used by cooperatives with large memberships. But it is noteworthy that several cooperatives with small memberships make use of representation systems with districts or divisions or delegate voting. These results suggest that some cooperatives define their representation system with districts, not only when having large memberships, but also for providing a local focus when their members are widely dispersed.

### Type or Function:

Table 7 classifies the 1,268 direct membership cooperatives by 9 different types or functions. In all categories, at-large representation was most prevalent (65.6 percent).

Table 5— Distribution of membership size across representation systems of direct-membership co-ops, 1995

|               |          |      |                                       |      | Repres | entation:                   |     |  |     |     |       |                    |  |
|---------------|----------|------|---------------------------------------|------|--------|-----------------------------|-----|--|-----|-----|-------|--------------------|--|
| Membership    | At-large |      | <b>By</b><br>geographic<br>districts1 |      | di     | By<br>district<br>delegates |     | At-large &<br>geographic<br>districts1 |     |     |       | Total <sup>2</sup> |  |
|               | No.      | %    | No.                                   | %    | No.    | %                           | No. | %                                      | No. | %   | No.   | %                  |  |
| Less than 100 | 142      | 87.1 | 14                                    | 8.6  | 1      | 0.6                         | 6   | 3.7                                    | -   |     | 163   | 100.0              |  |
| 100-249       | 162      | 81.0 | 20                                    | 10.0 | 3      | 1.5                         | 15  | 7.5                                    |     |     | 200   | 100.0              |  |
| 250-499       | 234      | 75.5 | 52                                    | 16.8 | 3      | 1.0                         | 19  | 6.1                                    | 2   | 0.6 | 310   | 100.0              |  |
| 500-999       | 176      | 59.7 | 83                                    | 28.1 | 4      | 1.4                         | 31  | 10.5                                   | 1   | 0.3 | 295   | 100.0              |  |
| 1 ,000-2,499  | 93       | 42.9 | 82                                    | 37.8 | 5      | 2.3                         | 35  | 16.1                                   | 2   | 0.9 | 217   | 100.0              |  |
| 2,500.4,999   | 17       | 29.8 | 24                                    | 42.1 | 2      | 3.5                         | 13  | 22.8                                   | 1   | 1.8 | 5 7   | 100.0              |  |
| 5,000 or more | 8        | 30.8 | 11                                    | 42.3 | 4      | 15.4                        | 3   | 11.5                                   |     |     | 26    | 100.0              |  |
| Total         | 832      | 65.6 | 286                                   | 22.6 | 22     | 1.7                         | 122 | 9.5                                    | 6   | 0.5 | 1,268 | 100.0              |  |

<sup>&</sup>lt;sup>1</sup> And/or divisions.

<sup>&</sup>lt;sup>2</sup> Excludes 45 cooperatives that reported voting method used but not representation and another **20** cooperatives that reported representation by both geographic and district delegates. Totals may not add to 100 percent due to rounding.

Table 7 reports the frequency and percentage of total respondents for each of the five systems of representation. These percentages are useful for comparing with those of the nine cooperative types or functions reported for the five different categories of representation systems.

Sixty-five percent of dairy cooperatives used atlarge representation, or about the same as the 66 percent for the total sample. Among the five categories of representation, 30 percent used geographic districts.

Seventy-one percent of fruit and vegetable cooperatives used at-large representation, slightly higher

Table 6— Distribution of membership size within representation systems of direct-membership co-ops, 1995

|                    |          |                |      |                                       | Repres | sentation:                         |     |                                  |     |                           |  |
|--------------------|----------|----------------|------|---------------------------------------|--------|------------------------------------|-----|----------------------------------|-----|---------------------------|--|
| Membership         | At-large |                | geog | <b>By</b><br>geographic<br>districts' |        | <b>By</b><br>district<br>delegates |     | At-large & geographic districts' |     | arge &<br>strict<br>gates |  |
|                    | NO.      | % <sup>2</sup> | No.  | % 2                                   | No.    | % <sup>2</sup>                     | No. | % 2                              | No. | % 2                       |  |
| Less than 100      | 142      | 17.1           | 14   | 5.2                                   | 1      | 4.6                                | 6   | 4.9                              | -   | •                         |  |
| 100-249            | 162      | 36.5           | 20   | 12.1                                  | 3      | 18.1                               | 15  | 17.2                             | -   | -                         |  |
| 250-499            | 235      | 64.8           | 52   | 30.1                                  | 3      | 31.7                               | 19  | 32.5                             | 2   | 33.3                      |  |
| 500-999            | 176      | 85.8           | 83   | 59.5                                  | 4      | 50.0                               | 31  | 57.7                             | 1   | 50.0                      |  |
| 1 ,000-2,499       | 93       | 97.0           | 82   | 87.9                                  | 5      | 72.6                               | 35  | 87.0                             | 2   | 83.3                      |  |
| 2,500.4,999        | 17       | 99.0           | 24   | 96.2                                  | 2      | 81.7                               | 13  | 97.6                             | 1   | 100.0                     |  |
| 5,000 or more      | 8        | 100.0          | 11   | 100.0                                 | 4      | 100.0                              | 3   | 100.0                            | •   | •                         |  |
| Total <sup>3</sup> | 832      |                | 286  |                                       | 22     |                                    | 122 |                                  | 6   |                           |  |

<sup>&</sup>lt;sup>1</sup> And/or divisions.

<sup>&</sup>lt;sup>3</sup> Excludes 45 cooperatives that reported voting method used but not representation and another 20 cooperatives that reported representation by both geographic and district delegates.

| Table 7— | Representation | used by | y direct-mei | nbership | cooperatives, | by ty | ype, 19 | 995 |
|----------|----------------|---------|--------------|----------|---------------|-------|---------|-----|
|----------|----------------|---------|--------------|----------|---------------|-------|---------|-----|

|                              | Representation: |              |     |                                       |     |                             |     |   |     |                       |                    |
|------------------------------|-----------------|--------------|-----|---------------------------------------|-----|-----------------------------|-----|---|-----|-----------------------|--------------------|
| Cooperative type/function    | At-I            | At-large     |     | <b>By</b><br>geographic<br>districts' |     | By<br>district<br>delegates |     | At-large <b>&amp;</b> geographic districts1 |     | ge &<br>rict<br>gates | Total <sup>2</sup> |
|                              | No.             | %            | No. | %                                     | No. | %                           | No. | %   | No, | %                     | No.                |
| Dairy                        | 43              | 65.2         | 20  | 30.3                                  | 1   | 1.5                         | 1   | 1.5   | 1   | 1.5                   | 66                 |
| Fruit and vegetable          | 54              | 71 <b>.1</b> | 13  | 17.1                                  | 1   | 1.3                         | 8   | 10.5  | -   | •                     | 76                 |
| Grain and oilseed            | 274             | 63.9         | 104 | 24.2                                  | 6   | 1.4                         | 42  | 9.8   | 3   | 0.7                   | 429                |
| Livestock                    | 13              | 65.0         | 3   | 15.0                                  | 3   | 15.0                        | 1   | 5.0   | •   | •                     | 20                 |
| Poultry                      | 6               | 60.0         | 2   | 20.0                                  | -   | -                           | 2   | 20.0  | •   | -                     | 10                 |
| Other marketing <sup>3</sup> | 17              | 41.5         | 15  | 36.6                                  | 3   | 7.3                         | 5   | 12.2  | 1   | 2.4                   | 41                 |
| Farm supply                  | 346             | 65.2         | 119 | 22.4                                  | 6   | 1.1                         | 59  | 11.1  | 1   | 0. 2                  | 531                |
| Cotton gin                   | 57              | 93.4         | 2   | 3.3                                   | •   | -                           | 2   | 3.3   | •   | -                     | 61                 |
| Other service                | 22              | 64.7         | 8   | 23. 5                                 | 2   | 5. 9                        | 2   | 5. 9  | -   | -                     | 34                 |
| Total                        | 832             | 65.6         | 286 | 22.6                                  | 22  | 1.7                         | 122 | 9.6   | 6   | 0.5                   | 1,268              |

<sup>1</sup> And/or divisions.

<sup>&</sup>lt;sup>2</sup> Cumulative percentages.

<sup>&</sup>lt;sup>2</sup> Excludes 45 cooperatives that reported voting method used but not representation and another 20 cooperatives that reported representation by both geographic and district delegates. Totals may not add to 100 percent due to rounding.

<sup>&</sup>lt;sup>3</sup> Includes cotton, dry bean and pea, rice, sugar, nut, and miscellaneous marketing cooperatives.

than the total sample. The 17.1 percent of total fruit and vegetable cooperatives using geographic districts was below the 22.6 percent for all cooperatives in the sample.

The 429 grain cooperatives used all five representation systems at about the same rate as the total sample  $\cdot$ 

Among 20 livestock cooperatives, (15 percent), used geographic districts, well below the 22.6 percent reported for all cooperatives in the sample. Livestock cooperatives had the greatest percentage use of district delegates. Two of the 10 responding poultry cooperatives used geographic districts and none used district delegates.

Among the 531 farm supply cooperatives, 346 or 65 percent used at-large representation, about the same as the total sample. All five systems of representation are used by this type of cooperative.

At-large representation was used by 57 of 61 cotton gin cooperatives, or 93.4 percent.

### Cooperatives by Region:

Table 8 compares how cooperatives in different regions of the Nation establish systems for representation on governing boards. Although cooperative State statutes vary in their membership voting requirements, there are no comparable restrictions to influence the frequencies of cooperatives' use of the five different systems of representation.

Among regions, use of the at-large system is the most common at 66 percent and geographic districts are the next most widely reported method at 23 percent of the total sample.

Observations from the North Central and the Great Plains regions were more than 71 percent of the total. This condition, coupled with the relatively small number of cooperatives that reported other than **at**large systems, resulted in no observations in some regions for representation systems that combine **at**large with districting methods. The lack of observations in these cases does not mean that these representation systems are not used by cooperatives in those regions.

Half of the 22 responses for the district delegates system are in the North Central region. Five of the six systems that combine at-large with district delegates are in the Great Plains region. Among the regional differences in table 8 is a relatively high percentage of atlarge representation use by Northeast cooperatives. The Intermountain region had a relatively high percentage of cooperatives combining at-large and geographic district representation.

Table 8— Representation used by direct-membership cooperatives, by region, 1995

|               |          |               |                                       |      | Repres | entation:                          |     |                                  |     |                       |         |  |
|---------------|----------|---------------|---------------------------------------|------|--------|------------------------------------|-----|----------------------------------|-----|-----------------------|---------|--|
| Region'       | At-large |               | <b>BY</b><br>geographic<br>districts* |      | dis    | <b>BY</b><br>district<br>delegates |     | At-large & geographic districts* |     | ge &<br>rict<br>gates | Total ³ |  |
|               | No.      | %             | No.                                   | %    | No.    | %                                  | No. | %                                | No. | %                     | No.     |  |
| Pacific       | 68       | 61.8          | 29                                    | 26.4 | 2      | 1.8                                | 11  | 10.0                             | -   | -                     | 110     |  |
| Intermountain | 39       | 60.0          | 14                                    | 21.5 | 1      | 1.5                                | 11  | 16.9                             | -   | -                     | 65      |  |
| Great Plains  | 276      | 71.7          | 67                                    | 17.4 | 4      | 1 .0                               | 33  | 8.6                              | 5   | 1.3                   | 385     |  |
| Southeast     | 90       | 67.2          | 27                                    | 20.1 | 2      | 1.5                                | 15  | 11.2                             | -   | •                     | 134     |  |
| North Central | 317      | 61 . <b>1</b> | 138                                   | 26.6 | 11     | 2.1                                | 52  | 10.0                             | 1   | 0.2                   | 519     |  |
| Northeast     | 42       | 76.4          | 11                                    | 20.0 | 2      | 3.6                                |     |                                  |     | -                     | 55      |  |
| Total         | 832      | 65.6          | 286                                   | 22.6 | 22     | 1.7                                | 122 | 9.6                              | 6   | 0.5                   | 1,268   |  |

States included in each region:

Pacific - CA, OR, WA, AK, and HI.

Intermountain -AZ, NM, CO, UT, NV, ID, WY, and MT.

Great Plains - ND, SD, NE, KS, OK, and TX.

Southeast - AR, LA, MS, AL, GA, FL, SC, NC, TN, KY, VA, and WV.

North Central - MN, IA, MO, IL, WI, IN, OH, and MI.

Northeast - MD, DC, DE, PA, NY, NJ, CT, RI, MA, VT, NH, and ME.

And/or divisions.

Excludes 45 cooperatives that reported voting method used but not representation and another 20 cooperatives that reported representation by both geographic and district delegates. Totals may not add to 100 percent due to rounding.

### Summary:

Of the five systems of representation for electing directors, the at-large alternative was the most frequently used (66 percent), followed by geographic districting, (almost 23 percent). Ten percent used some combination of districting with at-large representation methods. Only 22 cooperatives, or 1.7 percent, used a delegate system. Only six cooperatives, or 0.5 percent, combined district delegates with an at-large representation system.

Larger cooperatives tended to make the most use of districting, delegates, or some combination that included at-large methods. Some relatively small-membership cooperatives also used districting methods for defining their systems of member representation.

By cooperative type or function, about 66 percent used at-large methods (93.4 percent among cotton ginning cooperatives). Dairy cooperatives used geographic districts in the highest percent. More than 71 percent of survey respondents to representation questions were from the North Central and Great Plains regions.

# Federated and Mixed-Membership Cooperatives

Thirty-two federated and **31** mixed-organizational-structure cooperatives responded to questions on voting and representation. Two mixed-membership cooperatives are excluded from the tabulations because they used both one-member, one-vote and proportional voting.

### **Voting Method**

The frequency of one-member, one-vote and proportional voting are reported separately for federated and mixed cooperatives and combined in subtotals (table 9). One-member, one-vote was used by 51 federated and mixed cooperatives, while 10 used proportional voting. Twenty-seven of the 32 federated cooperatives and 24 of 29 mixed cooperatives used the one-member, one-vote method. Eighteen out of 61 cooperatives with federated or mixed structures were in farm supply.

Table 10 presents the voting methods of federated and mixed cooperatives by region. With fewer federated and mixed cooperatives than the direct membership cooperatives, the differences in State statutes do not distort results. Several statutes allow cooperatives with organizations as members to have proportional voting.

Twenty-seven of the 61 total federated and mixed cooperatives reporting were in the North Central region (table 10). Twenty-two North Central cooperatives used one-member, one-vote and five used proportional voting. All **14** federated and mixed cooperatives in the Great Plains region used one-member, one-vo te.

### **Representation Systems**

Federated and mixed cooperatives use the same types of representation systems as direct-membership **cooperatives**— exclusive at-large, two kinds of districting, and two kinds of combined representation systems.

Table 9— Federated and mixed cooperatives using one-member, one-vote or proportional voting by type, 1995

| Tune of secondarities   | One-M      | ember, One | e-Vote   | Prop      | ting               | Total    |       |
|-------------------------|------------|------------|----------|-----------|--------------------|----------|-------|
| Type of cooperative     | Federated  | Mixed 1    | Subtotal | Federated | Mixed <sup>1</sup> | Subtotal | lotai |
|                         | ********** |            |          | Number    | ••••••             |          |       |
| Cotton                  | 3          | 4          | 7        |           |                    |          | 7     |
| Dairy                   | 2          | 6          | а        | 1         |                    | 1        | 9     |
| Fruit and vegetable     | 2          | 2          | 4        | -         | 3                  | 3        | 7     |
| Grain and oilseed       | 2          | 2          | 4        | -         | -                  | -        | 4     |
| Livestock               | -          | 1          | 1        | -         | -                  | -        | 1     |
| Miscellaneous marketing | 1          | -          | 1        | -         | -                  | -        | 1     |
| Farm supply             | 7          | 7          | 14       | 2         | 2                  | 4        | 18    |
| Cotton gin              | 2          | 1          | 3        | -         |                    | -        | 3     |
| Other service           | 8          | 1          | 9        | 2         |                    | 2        | 11    |
| Total                   | 27         | 24         | 51       | 5         | 5                  | 10       | 61    |

<sup>&</sup>lt;sup>1</sup> Excludes two mixed cooperatives that use both voting systems.

### Federated Cooperatives:

Table **11** reports the representation method for 25 federated cooperatives by commodity or industry type. Thirteen used geographic districting for determining representation in director elections, while 9 used **at**large methods.

### Mixed-Membership Cooperatives:

Table 12 reports the representation method for 21 mixed cooperatives by commodity or industry type. Nine each used either at-large representation or a geographic districting system.

### **Summary and Conclusions**

### Direct-Membership Cooperatives:

The predominant choice for voting in direct-membership cooperatives is one-member, one-vote, regardless of commodity, region, or membership size.

Statutes for cooperative incorporation have required one-member, one-vote in several States. Although a few States have recently changed their statutes to allow proportional voting, about half have had these regulations for many years. They have helped **reenforce** the predominance of one-member, one-vote systems. However, in States with statutes that have permitted both methods, proportional voting is 9 percent, only slightly higher than the overall average of 7 percent.

Proportional voting is most widely practiced in the Pacific region among fruit and vegetable cooperatives, and among most of the local grain and farm supply cooperatives in Illinois, due to that State's security laws and incorporation statutes.

The most frequently used method for defining elected representation, regardless of region or commodity type, is with at-large election methods. Geographic districting is the second most frequently used. As membership size increases, cooperatives are more likely to use either geographic districting, a delegate system, or some combination. Cooperatives in the Northeast and Great Plains had the highest percentage use of at-large methods. Pacific region cooperatives had the highest percentage use of geographic districting. By type or function, cotton ginning cooperatives had the highest use of at-large methods.

Of the three remaining options for determining representation for director elections, the most frequently used method was the combination of at-large with districting. Dairy cooperatives used this method in the smallest percentages, the miscellaneous marketing cooperatives in the largest percentages. By region, Intermountain cooperatives had the highest percentage use of this method, while organizations in the Great Plains reported the lowest use.

Relatively few cooperatives used a delegate system, either in combination with at-large representation or exclusively with delegates. The largest number of cooperatives using a delegate system were in the North Central region. The largest number using atlarge with a delegate system were in the Great Plains. By type, farm supply and grain cooperatives had the

Table 10- Federated and mixed cooperatives using one-member, one-vote or proportional voting by region, 1995

| Time of accounting  | One-M                                   | ember, One | e-Vote   | Prop      | ting    | Total    |       |
|---------------------|---|------------|----------|-----------|---------|----------|-------|
| Type of cooperative | Federated                               | Mixed 1    | Subtotal | Federated | Mixed 1 | Subtotal | iotai |
|                     | *************************************** |            |          | Number    |         |          | ••••• |
| Pacific             | 2                                       | 1          | 3        |           | 3       | 3        | 6     |
| Intermountain       | 1                                       | 1          | 2        |           | 1       | 1        | 3     |
| Great Plains        | 10                                      | 4          | 14       |           |         |          | 14    |
| Southeast           | 1                                       | 4          | 5        |           | 1       | 1        | 6     |
| North Central.      | 11                                      | 11         | 22       | 5         |         | 5        | 27    |
| Northeast           | 2                                       | 3          | 5        |           |         |          | 5     |
| Total               | 27                                      | 24         | 51       | 5         | 5       | 10       | 61    |

<sup>1</sup> States included in each region: Pacific - CA, OR, WA, AK, & HI

Intermountain - AZ, NM, CO, UT, NV, ID, WY, & MT

G reat Plains - ND, SD, NE, KS, OK, & TX

Southeast - AR, LA, MS, AL, GA, FL, SC, NC, TN, KY, VA, & WV

North Central - MN, IA, MO, IL, WI, IN, OH, MI

Northeast - MD, DC, DE, PA, NY, NJ, CT, RI, MA, VT, NH, & ME

highest percentage use of a delegate system, though grain cooperatives often combined at-large with a delegate system.

### Federated and Mixed Membership:

One-member, one-vote was the predominant voting system used among the federated and mixed-structure cooperatives (51 of 61). Geographic district representation was used by 22 of these cooperatives, while 18 organizations used at-large representation.

Most U.S. agricultural cooperatives prefer to have

equal voting power among individual members—onemember, one-vote. The most frequently used method for defining representation was elections at-large. As cooperative membership size increases, there is a strong tendency to shift away from at-large techniques, in favor of geographic districting, delegate systems, or some combination of methods. This tendency generally holds across regions and commodities, although federated cooperatives used districting more frequently than at-large methods, mixed membership cooperatives used at-large and districting techniques equally often.

Table II- Representation used by federated cooperatives, by type, 1995

|                         | Representation: 1 |   |                                    |  |                               |       |  |  |  |
|-------------------------|-------------------|---|------------------------------------|--|-------------------------------|-------|--|--|--|
| Type of cooperative     | At-large          | <b>BY</b><br>geographic<br>districts <sup>2</sup> | <b>BY</b><br>district<br>delegates | At-large & geographic districts <sup>2</sup> | At-large & district delegates | Total |  |  |  |
|                         | Number            |   |                                    |  |                               |       |  |  |  |
| Cotton                  | 2                 | 1   | -                                  |  |                               | 3     |  |  |  |
| Dairy                   | 1                 | 1   |                                    |  |                               | 2     |  |  |  |
| Fruit and vegetable     | -                 | -   |                                    | 1  |                               | 1     |  |  |  |
| Grain and oilseed       | -                 | 2   |                                    | -  |                               | 2     |  |  |  |
| Miscellaneous marketing | -                 | 1   |                                    |  |                               | 1     |  |  |  |
| Farm supply             | 2                 | 3   | 1                                  |  | 1                             | 7     |  |  |  |
| Cotton gin              | -                 | 2   |                                    |  |                               | 2     |  |  |  |
| Other service           | 4                 | 3   |                                    | -  |                               | 7     |  |  |  |
| Total                   | 9                 | 13  | 1                                  | 1  | 1                             | 25    |  |  |  |

<sup>&</sup>lt;sup>1</sup> Seven cooperatives that provided information on voting method used did not report on representation.

Table 12— Representation used by mixed cooperatives, by type, 1995

| Type of cooperative   | At-large | <b>BY</b><br>geographic<br>districts <sup>1</sup> | <b>BY</b><br>district<br>delegates | At-large & geographic districts 1 | At-large & district delegates | Total |  |  |  |
|-----------------------|----------|---|------------------------------------|-----------------------------------|-------------------------------|-------|--|--|--|
|                       | Number   |   |                                    |                                   |                               |       |  |  |  |
| Cotton                | 1        | 1   |                                    |                                   |                               | 2     |  |  |  |
| Dairy                 |          | 4   |                                    | 1                                 |                               | 5     |  |  |  |
| Fruit and vegetable   | 1        | 2   |                                    | 1                                 |                               | 4     |  |  |  |
| Grain and oilseed     | 1        | 1   |                                    |                                   |                               | 2     |  |  |  |
| Livestock and poultry | •        | 1   | •                                  |                                   |                               | 1     |  |  |  |
| Farm supply           | 5        |   | 1                                  |                                   |                               | 6     |  |  |  |
| Cotton gin            | 1        |   | •                                  |                                   |                               | 1     |  |  |  |
| Total                 | 9        | 9   | 1                                  | 2                                 | 0                             | 21    |  |  |  |

<sup>1</sup> And/or divisions.

<sup>&</sup>lt;sup>2</sup> And/or divisions.

### **Appendix**

### State Statutes and Laws

Cooperative incorporation statutes and the securities laws in many States restrict voting methods in different ways and to varying degrees. Some State statutes restrict voting power to be exclusively **one**-member, one-vote, while others allow proportional voting with various restrictions. Although these regulations restrict choices about voting methods, they represent historical and institutional preferences about democratic governance of cooperatives.

A comparison of one-member, one-vote and proportional voting can be examined as aggregations of individual choices or as preferences, only when confined to States that allow both methods of voting. Furthermore, counting the incidence of voting methods only for States that allow both methods of voting would not necessarily provide a meaningful count if some of these States only recently revised their cooperative statutes to allow either method of voting. Even when States have revised their regulations most cooperatives continue to use their original policies. For this reason, States that recently revised their incorporation statute restrictions on proportional voting were not included in the comparison data set for table 2.

Earlier surveys of voting by cooperatives recognized, but did not consider the effect of States having widely differing regulations on voting, when reporting national or regional results. This report provides a special tabulation of voting methods by direct-membership cooperatives in States that allow both methods (table 2).

Cooperative incorporation statutes in 21 States require one-member, one-vote. Eleven States have either recently revised their statutes to permit proportional voting, or have allowed its use under certain circumstances. (Reilly, 1996). Eighteen States have cooperative incorporation statutes that allowed either voting method since at least the 1982 survey of State statutes. (Baarda, 1980.)

Illinois is the only State that required cooperatives to use proportional voting if organized on a stock basis. In addition, its proportional voting requirement is not related to volume of patronage, rather, a member has one vote for every share of stock invested in the cooperative. Many cooperatives in Illinois have historically been organized on a stock basis, and therefore onemember, one-vote was prohibited. Although the State's regulations on proportional voting for all stock-holding businesses have recently been revised to allow one vote per member or per investor, most cooperatives were organized when the earlier rules were in effect.

### **Glossary**

- 1. At-large voting system-When a representative is elected by the entire membership.
- 2. Delegate system-Delegates are officers, intermediate to members and directors, who act as agents for members in cooperative decision-making. They typically act in place of the members, as a delegate body at delegate meetings. Powers generally always include electing the cooperative board of directors and approving financial statements, but may also include election of other officers, proposing and approving governing resolutions, as well as bylaw changes. Delegate systems are generally combined with a districting system. Delegates represent members from respective districts, and serve in the interest of cooperative representativeness.
- 3) Direct-membership cooperatives-Agricultural cooperatives organized so only farmers or ranchers, as producers, are the members.
- **4)** District system-Member representation by directors is defined by geographic regions.
- **5)** Federated cooperatives-Agricultural cooperatives organized **so** only other cooperatives make-up the membersh**ip** of the organization.
- 6) Geographic-district, election system-District divisions across a cooperative's membership area are the basis for representation and election to office. Members from within a district, elect fellow district member(s) to represent them in cooperative decision-making. Officers are generally elected at annual district meetings.
- 7) Mixed-Both cooperative organizations and individual farmers are members.
- 8) One-member, one-vote system-Voting power based solely on farmer membership in a cooperative. Each member has equal voting power, i.e., one vote.
- 9) Proportional voting system-Voting power based on member's use of the cooperative or on the amount of stock ownership. Typically, each member is allocated one vote, plus additional votes based on the amount of volume transacted with the cooperative or stock owned.

### References

- Baarda, James R., State Incorporation Statutes for Farmer Cooperatives. Washington, D.C.: USDA ACS CIR 30, Oct. 1980.
- Butler, Gillian, Designing Membership Structures For Large Agricultural Cooperatives. Washington, D.C.: USDA ACS RR 75, August 1988.
- Craig, Jack, The Nature of Cooperation, Blackrose Press, 1993.
- Ginder, Roger and Ron E. Deiter, "Managerial Skills, Functions, and Participants," in David Cobia (ed.) Cooperatives in Agriculture, New Jersey: Prentice Hall, 1989.
- Gray, Thomas W., Structuring for Member Control in Large Cooperatives: A Case Study in Dairy. Washington, D.C.: USDA ACS RR 72, July 1988.
- Gray, Thomas W. and Gillian Butler, "Charting From Within a Grounded Concept of Member Control." Journal of Agricultural Cooperation. 6.1991.
- Gray, Thomas W. and Gillian Butler, Membership Structural Design, Washington, D.C.: USDA/RBS/CS RR 131, Nov. 1994.
- Reilly, John, D., Recent Changes to State Incorporation Statutes Used by Farmer Cooperatives, Washington, D.C.:USDA/RBS/CS, unpublished manuscript, 1996.
- Schomisch, Thomas, and Gillian Mirowsky, Delegate Systems, Washington, D.C.:USDA ACS unpublished manuscript, 198 1.
- Ward, Clement, Vernon Schneider, Ramon Lopez. 1979. Voting Systems in Agricultural Cooperatives. Washington, D.C.: USDA ESCS RR 2, February 1979.