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Cooperative Involvement in Issues of Domestic Farm Policy

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College Station, Texas

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**COOPERATIVE INVOLVEMENT IN
ISSUES OF DOMESTIC
FARM POLICY**

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Foreword

Should cooperatives be directly involved in advocating farm programs on behalf of their members? Except in dairy, this role has traditionally been left to the commodity groups and general farm organizations. Yet, in 1983 it was learned from the PIK program that farm programs have a profound impact on cooperatives. That impact is by no means limited to production control programs such as PIK.

The purpose of this publication is to explain the impact of farm programs on cooperatives. No effort is made to quantify this impact. Discussions were conducted with several major cooperative managers regarding the nature of the impacts. While the impetus for this study arose out of the adverse impact of the PIK program on cooperatives, it draws on and encompasses the experience and policy developments since then including the enactment of the Findley loan, the marketing loan, and the long-term conservation reserve. In addition, comments are made concerning the potential impact of the Gramm-Rudman balanced budget initiative and related moves toward less government involvement in agriculture.

The publication is composed of two major components.

- In the first part we explore the broad issues associated with farm policy impacts on cooperatives. The suggestion is made that commodity groups and general farm organizations cannot possibly represent cooperatives' interest in farm policy because those interests are unique--even for the farmer-members of cooperatives. In reaching this conclusion, we review the historical impacts of various types of policies on cooperatives.
- In the second part we analyze the role of cooperatives under five different alternative types of farm programs. We conclude that while government can be a very effective facilitator (via tools such as marketing orders), the heavier the hand of government, the weaker the cooperative system. At the same time, we recognize that those on moderate size farms, who are the predominant cooperative members, have great difficulty operating in an open market and must

be provided the tools of survival.

It is the authors' hope that this paper will foster discussion of the important issue of cooperatives' role and interest in the process of farm policy formulation.

This project was supported by the Agricultural Cooperative Service, USDA, although the views expressed in this publication do not necessarily reflect their position on the issues discussed in it.

Introduction

The role that cooperatives *should* play in the development of farm programs (target prices, support prices, farmer-owned grain reserve, acreage reduction, conservation reserves, marketing orders, trade policy, etc.) has become an item of major interest and controversy. Many cooperatives were "blindsided and/or broadsided" by the PIK program. In a time of farm financial crisis and balanced budget initiatives, cooperatives are equally affected by not being afforded the tools by which their farmer members can survive.

It is the conclusion of this study that PIK simply brought the important issue of cooperative involvement in farm program development to the surface--to a level of visibility. *Farm programs have, in fact, always had an impact on cooperatives, not just on their members. More importantly, the impact of many traditional provisions of farm programs on cooperatives has been negative--adverse to the cooperative interest and maybe, on balance, to the longer-term interest of producer members!* The problem is one of sorting out those program attributes that support cooperatives from those that do not.

The interest of the cooperative member in policy is highly complex. From both a theoretical and philosophical perspective, a cooperative's interest in policy should be the same as that of its members. *The members' interests should be motivated by maximizing their returns through the utilization of cooperative services.* In practice, however, questions arise as to how many producers perceive *their interest* from the perspective of *their cooperative's success*. Unless there are strong cooperative initiatives that consider and stress the impacts of policies upon *both* the cooperative and the farm, the tendency is for the farmer to consider only the farm level impacts of policy. Likewise, there may be a tendency for cooperative's

management to only consider the impacts of policies on the cooperative -- without adequate consideration of the farm level impacts. *Wise cooperative policy development requires consideration of both levels of effects.*

This analysis likewise suggests that the cooperative members' interest in policy, properly developed to consider both the cooperative and farm level effects, may be quite different than that of the nonmember. While nonmembers may favor high price supports and production controls, for example, members of an export-oriented cooperative may be quite opposed to such policies. That is a shocking conclusion because it may mean that neither a general farm organization (Farm Bureau, Farmers Union, etc.) nor a commodity group (National Association of Wheat Producers, National Corn Producers, etc.) may be able to represent the interests of both cooperative members and nonmembers. Such an analysis also serves to emphasize the importance of a cooperative communicating with its members regarding their mutual interests in policy issues.

Various types of cooperatives are affected differently by farm programs. Supply cooperatives are more directly affected by acreage reduction programs than marketing cooperatives since farmers set aside their lower quality land, output is less affected than the quantity of inputs used in production. Even among marketing cooperatives, the impact of acreage reduction programs is affected by the diversity of products marketed. A marketing cooperative of a single commodity with a price support program (i.e. cotton), for example, would be more adversely affected than a marketing cooperative of multi-commodities--some supported and some not.

It is also the conclusion of this study that the functions and strategies performed by cooperatives affect the optimal mix of policies. This being the case, different cooperatives can logically come to different

conclusions regarding the appropriate program direction. Extensive dialogue is needed among cooperatives and their members to assure that they are not running at cross purposes in policy development.

The purpose of this publication is to explore the basis for these conclusions. This will be done by selecting specific illustrative farm program features and analyzing their impacts on cooperatives and their members. The examples selected are designed to represent a range of program dimensions, many of which will become the focal point of future farm bill debate.

In the study, the authors draw on their experiences in the fields of cooperatives and public policy. They also draw on interviews of cooperative leaders conducted over the period in which the 1985 farm bill was being developed.

Cooperative Involvement In Policy

Aside from milk, rice, and sugar, cooperative involvement in farm program development generally has been limited to those activities that directly affect the day-to-day operation of cooperatives. Cooperative lobbying activities, therefore, have tended to concentrate on areas such as protecting the Capper Volstead Act, maintaining cooperatives' tax status, maintaining transportation regulations favorable to cooperatives, obtaining reasonable chemical regulations, and assuring adequate energy supplies to farmers.

Cooperatives have tremendous potential for impacting farm programs. Milk cooperatives have traditionally been classed as one of the most politically potent lobbying forces in Washington. While milk cooperatives have been deeply involved in the determination of policy with regard to milk, they typically have not been a factor in debate on other commodity

issues such as feed grains. This is the case despite the reality that feed grain programs have a profound effect upon the prices, cost, supplies, and stocks of these commodities. PIK clearly demonstrated this impact.

Rice cooperatives have been deeply involved in the determination of rice policy. Yet rice policy initiatives have sometimes ventured out on their own without adequate consideration by either them or other cooperatives of the need for a coordinated effort that cuts across agriculture. In the 1985 farm bill, rice, cotton, and honey were the only commodities for which a marketing loan was mandated. For wheat, feed grains, and soybeans, it was only authorized. If a marketing loan was good for rice, cotton, and honey, why not for other commodities?

Cooperatives that do not become involved in the farm policy arena have either explicitly or implicitly decided that their interests in farm programs can best be reflected by their members through the traditional farm organizations (general or commodity). In making this decision, cooperatives have again implicitly or explicitly concluded that their (the cooperatives') interest in farm programs is minor or that their members are already reflecting the cooperative's interest in policy through their farm organizations. If this is the case, why PIK and why the continuing farmer support for PIK type production control programs?

In a recent Texas survey, two-thirds of the producers felt that if large stocks reappear, PIKs should be used again. Even in Illinois, 53 percent of the producers endorsed the use of PIK again (Guither). Yet in the current post PIK period, many regional and local cooperatives are near financial failure or have already failed. The beginnings of their problems started with PIK and were compounded by several errors in farm and

macroeconomic policy since then. Interestingly, the 1985 farm bill considerably expands the potential for using PIK in lieu of deficiency payments or long-term land retirement programs (the conservation reserve).

There is a very major question as to whether cooperative members recognize their specific interest in farm programs as well as their cooperative's interest. But should the cooperative's interest and the member's interest in policy be one and the same? The answer to this question deserves to be pondered. What are cooperatives doing to make sure their members understand and correctly reflect their interests as well as their cooperative's interests in the policy deliberations of the farm organizations to which they belong?

Producers may be quite sensitive to the impact of policy on the production sector in which they operate. They may not be nearly as sensitive to the impact of policy on either the input (farm supply) or the marketing-distribution sectors. Cooperatives that operate in these sectors can increase the level of producer sensitivity to policy impacts upon the whole agricultural and food system. That sensitivity is critical to developing policy which serves the long-run interest of producers and cooperatives.

Even among the more highly integrated milk cooperatives, one can question if there is sufficient discussion and consideration of the appropriate mix of producer and cooperative interests in developing the specific attributes of the dairy program and its interpretation. To answer this question, one can witness the consternation regarding the impact of the milk diversion and dairy buy-out program on the utilization of cooperative plant capacity and the escalation of transportation costs.

In retrospect, did milk cooperatives benefit from increased invest-

ment required to handle milk surpluses that were the result of the high support prices they advocated in the early 1980s? Did milk producers benefit? Did cooperative members benefit more than nonmembers? These are questions that are difficult to answer, but they are relevant to future dairy policy development. Many of the conflicts that have arisen over marketing order provisions exist because of the differential impacts of orders on regulated versus nonregulated plants and on cooperative versus proprietary firms and their respective producers.

The Evolution of Today's Farm Policy

PIK, the farm financial crisis, the deregulation, and balanced budget initiatives have brought the issue of cooperative involvement in policy development to the forefront. Careful evaluation of the impacts of government programs on cooperatives, however, reveals that policy impacts run much deeper than production control programs--to the target price, the nonrecourse loan program, the farmer owned grain reserve, marketing quotas, volume prorates and even macroeconomic policy. The Gramm-Rudman balanced budget initiative could have particularly important implications for cooperatives.

Price Supports and the Nonrecourse Loan

The centerpiece for farm programs, whether in dairy or in crops, is the price support programs. Historically, one of the major goals of farm organizations has been to raise the level of price support. This continues to be a prominent goal for several farm organizations. The implied lower level of price support, including its budget exposure and payment limit implications, became the center of resistance to the Findley and marketing loan provisions of the 1985 farm bill.

In crops, the price support function is performed by the nonrecourse loan. This loan was initially established as a tool of orderly marketing, designed to spread marketings over the crop year--from one harvest to the next.¹ The loan concept, however, soon became a tool primarily for supporting prices on a year-to-year basis. Under these circumstances, *government became the market* as it was through much of the 1950s and the 1960s. The effect has been to nullify or discourage marketing throughout the year. If farmers cannot receive the support price plus interest costs, or even if a higher market price is anticipated in the future, the volume of farmer marketings falls abruptly.

In the process of using the nonrecourse loan as a price support device, the only way the United States could compete in the world market was to subsidize exports. Export subsidies of various types were then a major farm policy tool of the U.S. government up to the consumation of the Russian grain deal in 1972. The willingness to subsidize exports was, in fact, the prime determinant of the level of exports throughout the 1950s and the 1960s. Even with subsidies, exports only totaled \$4 billion to \$8 billion annually throughout this period.

In the presence of relatively high price supports, low exports led to a large surplus of storable commodities such as wheat, rice, and cotton. The result was extensive efforts to control production. Acreage allotments and quotas (provided for in the initial major farm programs) were followed by massive land retirement programs. Even as late as the early 1970s, the government was paying farmers to hold 60 million acres of land

¹ Interestingly, marketing order provisions, such as volume prorates and reserve pools, have the same objective. Those orders that have developed burdensome surpluses have likewise been utilized to raise prices as opposed to simply promoting orderly marketing conditions.

out of production. Despite production controls, stocks accumulated in ever normal granaries of the 1950s or their equivalent. Extensive production control programs did not solve the farm problem. New program alternatives were sought.

Target Price

The answer to the farm policy dilemma of the 1950s and the 1960s was a lowering of the loan rate and a substitution of direct government payments to producers. This began in the late 1960s and evolved into the target price program in 1971.

The target price made it politically acceptable to lower the loan rate. This change in government policy combined with unfavorable weather and a favorable overall world economic trading environment led to a boom in exports. In 1973 and 1974, export demand was so strong that the loan level was of little concern to farmers. By the mid to late 1970s, however, the maintenance of a competitive loan rate was recognized as being so crucial that a semi-automatic adjustor of the loan rate to the world market price was provided for in the 1977 farm bill. If the market price came within 5 percent of the loan rate, the loan rate could be lowered below the minimum specified by law. Unfortunately, the Secretary of Agriculture has seldom had the political fortitude to use that authority--even if the loan rates were sufficiently high that U.S. grain and/or cotton were priced out of the world market. This is exactly what happened in the early 1980s.

Farmer-Owned Grain Reserve

In the mid 1970s, a consensus developed that the world food supply-demand balance had changed sufficiently that chronic surpluses were no

longer a major concern. Any buildup in stocks would be temporary. In the eyes of many economists and policymakers, the farm problem had shifted from one of excess capacity to periodic shortages combined with unstable farm prices and incomes.

To deal with the problem of price instability, USDA developed the farmer-owned grain reserve. The theory of the reserve was that in years of surplus production, grain would move into the reserve. It would be released at a higher price in years of deficit production. With the reserve, prices would be maintained within a corridor between the loan rate and the release price.

The reserve worked well in its initial years when market supplies were relatively tight and the reserve program was not overly attractive. From 1978 through 1980, the market price moved systematically between the loan rate and the release price.

The reserve's functioning as a market-oriented stabilization device, however, encountered serious problems in the early 1980s. To soften the blow of the Russian grain embargo a political decision was made in 1980 to raise the reserve loan rate substantially above the regular loan. In addition, interest payments were forgiven on the loan, construction of farm storage was subsidized, and large quantities of grain were moved into the reserve. In the process, on-farm storage capacity increased dramatically. This policy did not change despite the reality that the reserve loan rate approached, and even exceeded, the world market price. The result was lower exports--directly contrary to cooperatives' interest as well as interest of their members.

Diversion and Production Control Programs

The advent of direct farmer payments provided an additional tool by

which the government could adjust production to market needs. This tool made farm program benefits conditional on reducing acres planted. Programs of this type went by various names--diversion programs, set-aside, reduced acres programs (RAP), or the current acreage reduction programs (ARP). These programs largely replaced the mandatory allotment and land retirement programs that had been the center of production control policies until the early 1970s. The important distinction between land retirement and diversion programs is that under land retirement programs, farmers are overtly paid by the government to take land out of production. In the diversion programs, farm program benefits (deficiency payments and access to the nonrecourse loan) are contingent on reducing the number of acres farmed.

History demonstrates that, unless a large number of acres of land are taken out of production, acreage controls have little impact on the quantity produced. Economists use the term slippage to refer to the difference between the percent of land taken out of production and the percent of reduction in the quantity produced. A rule of thumb is that with a 15 percent reduction in acres planted, the quantity produced will fall by only 3 percent--80 percent slippage. Slippage is so high primarily because the poorest quality land is selected by the farmer to be removed from production.

The slippage concept is not just applicable to crop production. The very same phenomenon was experienced in the milk diversion program and is currently occurring in the dairy buy-out program. Analyses at Texas A&M University indicate that there was about 50 percent slippage in the milk diversion program. Theoretically, whole farm buy-out should yield a lower level of slippage. The diversion program, however, gave dairymen experi-

ence in "farming" production control programs. Practices such as trading cows could become as widespread as farming lake bottoms.

The higher the proportion of land removed from production, of course, the less slippage. That is what made PIK more effective in reducing production. In addition, whole farm land retirement programs are more effective than diversion programs because all land is removed from production. Of course, the most effective production control programs are those which set limits on the quantity that can be marketed (marketing quotas).

Findley and Marketing Loans

In the early 1980s, it became apparent that loan rates above world market prices were once again impeding exports of farm products. While loan rates had not been raised excessively by political action, the strong dollar, world recession, and developing country debt combined with production incentives provided by increasing target prices resulted in loan rates becoming the effective price floor. A sharp reduction in exports from 1983 through 1985 made the level of loan rates a major 1985 farm bill issue.

An idea, initially advocated by Wayne A. Boutwell, was to abrogate the effectiveness of the regular loan rate as a price floor by allowing producers to repay the loan at the world market price. Boutwell, a former aid to Senator Cochrane, is the president of the National Council of Farmer Cooperatives (NCFC). His bold idea, referred to as a marketing loan, was received with concern by some of the members of NCFC who generally were not involved directly in the export market and/or held the view that cooperatives should not be involved in farm policy development. While supported by the National Association of Wheat Growers, the National Corn Growers Association, and the Five-State Rice Producers Legislative

Group, the marketing loan idea was viewed with suspicion by farm organizations that either favored continuing the loan as a price support device or looked upon Boutwell's initiative as potential competition to their organization's farm policy initiative. Exporting firms generally supported the idea although they had suspicions about the cooperative source of the initiative.

The merits of the marketing loan were clear to any market-oriented person. Removing the loan rate as an effective price floor would automatically make farm commodities become world price competitive again. Surprisingly, the Reagan administration opposed the marketing loan idea. While the Reagan administration desired a lower loan rate to make products more competitive in the world market, it opposed the uncertainty associated with the level of government expenditures under the marketing loan.

An alternative to the marketing loan was to lower the loan rate. This option was opposed by farmers and farm organizations that had traditionally favored high price supports. It was also opposed by farmers who, because of the scale of their operation, exceeded the \$50,000 limit on deficiency payments. For them, one major advantage of the marketing loan was that the resulting increase in payment from the government (the difference between loan rate and repayment rate) would not be subject to the payment limit.

A compromise between these opposing forces was the Findley loan rate reduction. The Findley loan rate is set at a level below the regular loan

rate with the difference not being subject to the payment limit.² The Findley loan rate is still a price floor and could, under adverse conditions, price the United States out of world commodity markets.

Interestingly, a provision in the 1985 farm bill that sets a floor on the rate at which the marketing loan is paid back also could have the effect of pricing the United States out of the world market.³ This would happen any time the repayment rate rose above the world market price. In such an instance, it would be to farmers' benefit to forfeit the commodity to the CCC rather than pay back the loan at world price. Identically, the same effect occurs if the USDA estimates the world price; thus, the repayment rate becomes too high. Such potential consequences could be avoided by not allowing commodities to be forfeited to the CCC under a marketing loan--a type of recourse loan.

Only rice and cotton obtained the marketing loan as a mandatory program in the 1985 farm bill.⁴ Rice growers were required to repay their marketing loan at the world market price. Cotton growers obtained the marketing loan with alternative repayment rates of 70 percent of the loan rate repayment floor or the world price. In all other commodities, a mar-

²The term Findley loan comes from an earlier proposal by, then Congressman, Findley that the price support loan rate be reduced when the market price came within 5 percent of the loan rate. To make the reduction more acceptable to the large farm leadership, it was proposed that the reduction not be subject to the payment limit. As indicated previously, this provision was implemented into law but the discretionary authority was seldom used.

³This provision was a concession by cotton and rice producers to the administration as a means of controlling program costs.

⁴Rice is the commodity where cooperatives, perhaps, are the strongest political force of any major farm commodity. Dairy would be a close second.

keting loan was simply authorized to be used at the discretion of the secretary.

The marketing loan in rice and cotton should be a fascinating experiment. The high loan rate during the early 1980s caused a severe reduction in the U.S. market share with exports being limited largely to those that were subsidized. As a result, the ability to recapture markets under the marketing loan will be directly tested.⁵

Macroeconomic Policy

It would be wrong to blame everything that has happened to agriculture in the 1970s and the 1980s on farm policy. Macroeconomic policy (the power of the government to tax and spend) has also been an important contributor to the current farm problem.

Throughout the 1970s, the declining value of the dollar fostered exports. In the early 1980s the trend reversed. The dollar began a persistent long-term rise in value. The rising value of the dollar was caused by a combination of tax cuts, tight money supply, increased spending, and resulting high deficit.

Tax cuts early in the Reagan administration provided an economic growth stimulus. In the absence of a corresponding reduction in federal spending, a tight money policy was pursued which raised the interest rate and lowered the inflation rate. Increased government spending primarily was a result of defense buildup, entitlement programs, and increased interest on the national debt. The higher nominal interest rate combined with a lower inflation rate meant that the U.S. dollar was an attractive

⁵Rice can be argued to be a best case scenario for testing the marketing loan since the world market for rice is not dominated by state trading competitors as is cotton.

investment. The resulting strong dollar increased the effective price of U.S. commodities, as well as all exports, in terms of foreign currencies. A dramatic decline in exports resulted, aggravated by the floor prices set by commodity loan rates.

It was the over-valued dollar, world recession, and developing country debt that made the loan rate for several commodities exceed the world market price in 1982 through 1985. This, in turn, led to increasing pressures to control production and subsidize exports. One can argue, quite persuasively, that the payment-in-kind program was precipitated by macroeconomic and domestic farm policies more than by the 1980 grain embargo.

It is not yet clear how pervasive the impact of the Gramm-Rudman balanced budget initiative will be on agriculture. The initial 1986 nominal cut in government spending lowered the effective level of the target price and loan rate by proportionate reductions in payments from the government. If an attempt is made to balance the budget exclusively by spending reductions, even larger reductions would come in 1987 and subsequent years. Farmers could react to reductions in direct government payments by insisting on either higher loan rates or more effective production controls. Either action would put U.S. agriculture back in a less competitive situation in export markets. Budget cuts of an even larger magnitude could come in other USDA programs. Federal extension programs were on an initial "hit list" for exclusion from the budget to meet the Gramm-Rudman cuts. Large cuts in agricultural research, including cooperative research, information, and education, might likewise be anticipated.

Analysis at Texas A&M University clearly indicates that the achievement of a balanced budget exclusively by reduced spending would lead to consistently deteriorating economic conditions throughout the life of the

1985 farm bill. In fact, it is impossible to achieve a balanced budget exclusively through spending reductions because of the adverse effect of reduced government outlays on economic growth. The spending reduction goal needed to achieve a balanced budget literally becomes a moving target. A reduction in government spending thus reduces economic growth causing tax revenue to fall and requiring a continuously larger reduction in spending. The balanced budget is not achieved; it will not be before a severe recession ensues. In the meantime, agricultural income and asset values would be consistently declining.

The same analysis, on the other hand, indicates that balanced budget by a 50-50 combination of reduced spending and tax increases would yield substantial benefits for agriculture. Farm income would rise after 1987 and land values would begin to recover. It can thus be seen that macroeconomic policy decisions will have a major impact on farmers over the next five years--particularly as it interacts with the 1985 farm bill provisions.

Impact of Farm Policy on Cooperatives and Their Members

The discussion, so far, has been relatively sterile of specific cooperative impacts. Such unique cooperative effects occur both at the cooperative and producer-member level. These effects are uniquely cooperative because:⁶

- The cooperative is a unique form of business organization. Being member-owned and controlled, it generally has an obligation to

⁶This list of unique cooperative features is not meant to be complete. Nor is it meant to imply that all cooperatives either operate identically or have an identical membership composition. The combination of these factors, however, is critical to evaluating the differential impact of policy on cooperatives.

accept all of its members' production.⁷ While proprietary firms generally can buy only that portion of the production that they want, cooperatives do not have that privilege. As a result, one theory of cooperative membership looks on the cooperative and its membership as a single integrated unit. Also, cooperatives have not been in a sufficiently strong position to sort out which farmers could become members. While some cooperatives have closed membership, through marketing agreements, they are the exception rather than the rule.

- The obligation to take all of the members' production has tended to make the cooperative first handler oriented. The cooperative's first worry has become what to do with the product once it is harvested, rather than how to market it. As a result, cooperatives have tended to be brick and mortar storage facility oriented. This problem has been complicated by a cooperative's inability to carefully choose its membership. When surpluses develop in a market, the burden falls most heavily on the cooperative.
- Partially as a result of the unique attributes of the cooperative business organization, the cooperative generally finds itself in a precarious market position. The lack of member commitment has prevented cooperatives from becoming multinational in scope. The absence of a multinational dimension reduced cooperatives' ability to compete both domestically and internationally (Cook et al.).

⁷While cooperatives generally have the obligation to accept all of the members' production, only in the instance where cooperatives have marketing agreements are members required to market all of their production through the cooperatives. Cooperatives with marketing agreements, therefore, are uniquely different than those without them.

- Cooperative membership is unique and is becoming increasingly unique. Producers who encounter marketing problems, tend to become members of cooperatives. Cooperative membership tends to be composed primarily of farmers of moderate and small farms.⁸

Large scale farmers generally understand markets sufficiently to effectively utilize contract, futures, and options markets. They are often in a position to strike special deals with proprietary buyers. Moderate size farmers, once the backbone of American agriculture, are becoming fewer in number. Unless cooperatives find means by which they can capture the business of large scale farmers, they will become the businesses of predominantly smaller, part-time farmers--some already are! Farm program impacts on cooperatives are discussed below on a program-by-program basis because each program has a different effect. Understanding these effects is crucial to both the cooperative and to its producer members.

Price Supports

Ultimately prices are supported by the willingness of the government to buy commodities at the price support level. This is the case for milk (where the government stands ready to buy butter, nonfat powder, and cheese at the support price) or for crops (where the nonrecourse loan is used).

When price supports are raised above the world market price, exports decline. This makes it difficult, or impossible, to export U.S. commodities. *But the effect of price supports on cooperatives is more subtle.* In crops,

⁸ Obviously, this is less the case in commodities where cooperatives have a sufficiently large market share such that virtually all farmers are cooperative members. This is true, for example, in the case of milk in some markets and fruits and vegetables for processing.

this effect results from the *unwillingness of farmers to sell* their commodities when either:

- *Prices are near the support level, or*
- *There is the expectation of a price increase.*

Cooperatives, accordingly, must be very careful in making forward sales commitments (to either domestic or export buyers) because in the absence of a marketing agreement, producer-members may not be willing to release their commodities. *The same degree of care does not have to be exercised by multinational grain exporters because they always have the option of dealing in the grains of other countries.*

It is important to note that moving average or Findley loan rates will not necessarily solve the problem of producers failing to release their commodities for export. Even though the loan rate may be set at 75 percent of the market price, uncommitted farmers⁹ still may not market their products because of the expectation of a higher price. While a lower loan rate may be a necessary condition for maintaining competitiveness in exports, it is not necessarily a sufficient condition. The reference to lower loan rates as "market clearing loan rates" is a misnomer. This point will be discussed further, in a later section.

There is an important exception to the export restraints placed on cooperatives. This exception occurs where cooperatives have used the Form G loan combined with a marketing agreement and the operation of a pool pricing system.

Under the Form G loan program, approved cooperatives can use the price support program in the same manner as individual producers. The

⁹ An uncommitted farmer does not have a marketing agreement with the cooperative.

most basic Form G loan requirement is that the commodity be delivered to the cooperative under a uniform marketing agreement between the cooperative and each participating producer-member. The commodity must then be pooled. Pooling provisions, however, are sufficiently flexible to encompass purchase pools based on spot cash prices (daily pools), forward sales contracts, futures, or deferred pricing agreements, as well as seasonal pools. The cooperative tenders warehouse receipts on behalf of its producer members at its county ASCS office. The loan proceeds are then used to make advances to the producers.

A combination of benefits accrues to the cooperative and its members from using the Form G loan. The most important of these benefits is the ability to integrate the cooperative's marketing strategy with committed producer deliveries. By using the Form G loan, an export cooperative can have commodities readily available for present and future sales. *It can make commitments to both domestic and foreign buyers with the knowledge that the commodity will be available. Control of logistical and marketing decisions is in the hands of the cooperative, not its members. This contrasts directly with the regular loan program where commodity availability is often a major problem.* Additional advantages of the Form G loan include:

- interim financing is provided;
- lower interest rates often exist;
- price protection is available;
- planning is possible;
- costs are more predictable.

With all these benefits, why is it that Form G is not extensively utilized by grain cooperatives? That is an exceedingly difficult question to answer. Grain companies such as Continental and Cargill recognized the potential of Form

G creating competitive problems for them when they brought a law suit against its application in the major grains. Unfortunately, grain cooperatives have not utilized or benefited from the Form G loan as Continental and Cargill feared.

The grain cooperatives have apparently not seen the benefits--or they are afraid to venture into new territory. But is it really so new? Only rice cooperatives and, to a lesser extent, cotton and soybean cooperatives utilize Form G. These cooperatives maximize their marketing strength when the Form G pools are seasonal in length. But their use of Form G is not limited to seasonal pools. Call or delayed pricing pools give farmers the right to price their commodities while cooperatives control the product. That control gives the cooperative an advantage.

While Form G has its advantages, it does not solve the problems created by high loan rates. Form G does nothing to expand exports if the loan rate is set above the world market price. Cooperatives using Form G are in no better position to compete in export markets with a high loan rate than other grain exporters. While they have control over the grain, they cannot afford to sell at less than the loan rate or their pool price will not be competitive. It is instructive to note that in rice, where cooperative use of Form G is extensive, exports suffered in the face of loan rates that exceeded world market prices just as in other commodities where Form G is not extensively used.

In milk, the impact of price supports on cooperatives is more subtle and argumentative. The milk price support program shifts significant elements of the milk marketing function to the government. Specifically, much of the milk pricing function and, more importantly, the inventory management function are shifted to the government. The result is a sig-

nificant change in cooperative marketing responsibilities. It would be naive to argue that milk cooperatives are not involved in marketing. Marketing, however, would be a more significant cooperative function if there were less reliance placed on the price support program. This was, in fact, one of the effects of a movement toward premiums over federal milk order prices--milk cooperatives became more sophisticated in marketing.

The marketing loan may be an important new tool to avoid the export stifling effect of the price support loan. As long as there is no effective floor on the repayment price, producers could be less inclined to hold back on their marketings. In fact, this could be an "Achilles heel" for the marketing loan program; that is, under the marketing loan there may be reduced incentives for producers to store commodities. The result may be an increased market glut at harvest--which the loan program was originally designed to avoid. Such a glut could put an added burden on cooperatives. In a sense, orderly marketing and export competitiveness are incompatible except in more highly structured markets, as will be seen later.

The crosscurrents between producer and cooperative interests now become more apparent. While in the short-run producers may be interested in a high loan rate, a high loan rate will not be in the interest of export-oriented cooperatives. The members of an export-oriented cooperative may be able to justify a lower loan rate, a marketing loan, or even a limitation on availability of the nonrecourse loan as a means of promoting exports. Producers who are not members of an export-oriented cooperative may have more trouble justifying lowering the loan rate, limiting its availability, or accepting the marketing loan--even though it may be in their best long-run interest. Producers who are not members of export-o-

riented cooperatives *should be* just as interested in exports as are members; *thus the cooperative and its members can play a unique leadership role in promoting the appropriate direction for change in price support policy.*

Farmer Owned Reserve

The farmer owned grain reserve (FOR) is one of the more interesting and controversial aspects of farm policy. For a grain cooperative that is truly involved in marketing, (as opposed to only storage) FOR is a nightmare. It significantly complicates the problem of cooperative grain marketing because:

- When a higher loan rate is used for commodities entering the reserve, entry is more attractive. The more grain that moves into the reserve, the more difficult it is for cooperatives to pursue a longer-term marketing strategy.
- The reserve grain cannot be marketed until the release price is reached. The within-year release problem posed by the regular loan program is thus expanded into a three year release problem.
- Increased on-farm storage reduces the probability that the cooperative would eventually receive the farmers' grain. Relative to proprietary grain buyers, a cooperative's strength is at the local and regional level. That strength is importantly related to a cooperative's storage capacity. Once the grain is in cooperative storage, there is a high probability that it will eventually be marketed through the cooperative. If the grain is stored on the farm, rather than in the cooperative, there is a much greater probability that it will be sold to a proprietary elevator.

There is little doubt that the farmer owned grain reserve runs counter to the cooperative's interest. Does it also run counter to the

interest of its producer members? The answer to this question is steeped in controversy. Economists cannot agree on the merits of government controlled stocks--and FOR is government controlled since the support and release price as well as other provisions are controlled by the government. Almost a majority of the Texas farmers would prefer that a limit be placed on the size of FOR. Another 30 percent are not sure. Increasing realization exists that commodities are produced to be marketed. If they are held in storage, they act as a price depressant in future time periods.

It is important to recognize that changes in the nonrecourse loan would have an impact on FOR and vice versa. If the availability of the loan were limited, FOR would likewise be limited because it uses the non-recourse loan; likewise, if a limit were placed on the quantity of grain entering FOR, it would force the excess grain into the regular loan.

The implications of a marketing loan for FOR are unclear. What incentives would exist for entering FOR if a marketing loan existed? As indicated previously, the whole marketing loan concept is designed to make commodities available to the market. FOR has quite the opposite objective--to stabilize the availability of supplies over time.

Adopting a marketing loan on FOR commodities would have one major advantage. It would force the separation of FOR's role as a grain reserve from its use as a price support tool. Such a separation would represent a major change in farm policy and would clarify the objectives of FOR.

To operate FOR in the presence of a marketing loan would require substantially increased incentives for farmer participation in the reserve. Participants would need to receive at least a portion of the marketing loan benefits while gaining from the potential for price enhancement and/

or profits earned on storage.

Direct Payments

High cost of the current farm program makes direct payments from government subject to challenge--particularly with the advent of Gramm-Rudman. The problem of high government costs associated with target prices is compounded by Findley loan reductions and by the marketing loan.

The threat of substantial reductions in direct payments to farmers should cause heartburn for cooperatives and will result in financial hardship for their members. It could put many farmers and their cooperatives out of business. It could also reduce, rather than improve, the U.S. competitive position in world markets. This is the case for two reasons:

- Moderate size farmers are the most dependent on government programs for their survival, because, as indicated previously, moderate size farmers are less able to cope with the risk and uncertainty involved in agriculture. Substantially reduced direct payments to farmers will most adversely affect moderate size farmers that constitute the majority of cooperative's volume of business.
- Lower target prices reduce the probability that either the Findley loan reductions or the marketing loan can be maintained. The trade-off between price support and income support is still alive in agriculture. Income support is what made the marketing loan acceptable to producers as an option in the 1985 farm bill. Stiff application of balanced budget initiatives to farm programs could jeopardize the export-oriented progress that was made in the 1985 farm bill--the result being higher mandated loan rates.

Production Controls

It seems doubtful that the impact of production control policies on cooperatives during the 1950s and the 1960s was fully recognized. This may have been true for a number of reasons:

- Production was, as a general rule, expanding regardless of the controls, thus input sales and commodity marketings were not suffering.
- Cooperatives did not fully recognize the potential benefits of expanded production.
- Most cooperatives were not market-oriented (few are today).
- Most cooperatives were not directly involved in exporting farm products.

After PIK, cooperatives have increasingly recognized the adverse impact of production control policies on their business; however, different types of controls have different impacts. Input and marketing firms have very large fixed capital commitments to agriculture. As a result, a program that abruptly takes a large amount of land or a large number of dairy cows out of production is particularly disruptive--plant capacity stands idle; employees work less than full-time or should be laid off; and the margin and/or equity position of the cooperative suffers. Production controls applied on a more regular and systematic basis have a less disruptive impact. That creates an interesting irony--production controls enhance the stability of cooperative sales and marketings but reduce their long-run potential for growth.

Production control remains a viable farm policy issue. The 1985 farm bill, in effect, made PIK an explicit production control option. A 10 year conservation reserve was legislated retiring from production up to 45 million acres of erosive land. Calls continue for a return to mandatory

acreage allotments and marketing quotas even after the enactment of the 1985 farm bill.

There are those who believe that it is possible for the government to sufficiently fine-tune production so that marketings will not be reduced. In other words, production would be made consistent with market needs through farm programs. If the economy were expanding, more land would be put into production in anticipation of greater dividends. In a recession, land would be taken out. That is an admirable goal. The question is whether government programs can be operated that precisely.

One production management option that could have some potential would trigger controls when the ratio of carryover stocks to commodity use rose above a specified level. Such a trigger could be designed to assure adequate commodity supplies while preventing the accumulation of large surplus stocks. If the loan rate is lowered and put on a moving average basis, a production control trigger should not be necessary since stocks probably would not accumulate in the hands of the government.

The conservation reserve, if pursued to the full 45 million acres could have a unique impact on cooperatives because it provides a means by which older moderate size farmers can retire from farming. A Texas A&M University study suggests that older, moderate size farmers are frequently cooperatives' most reliable members (Black and Knutson, 1986). Cooperatives located in areas having a high proportion of highly erosive land, which is the target for the conservation reserve, could be particularly adversely affected.

Similar localized impacts could be associated with the dairy buyout program. The diversion program had by far the largest participation in states of the Southeast, Cornbelt, and Great Plains that had already been

experiencing declines in production. Cooperatives in the Southeast were decidedly weakened by the milk diversion program--experiencing under utilization of plant capacity and increased transportation costs associated with the obligation to perform on the requirements of full supply contracts with proprietary processors. The dairy buyout program can be expected to take its greatest toll in precisely the same regions.

Macroeconomic Policy Impacts on Cooperatives and Their Members

A noted agricultural economist has suggested that farm organizations would be better off if they spent most of their effort attempting to influence macroeconomic policy rather than worrying about "counterproductive" and "outdated" farm programs (Schuh).

There is merit in this line of argument. The position, however, was likely overdrawn to make the point. Clearly, not enough time has been spent by the agricultural establishment in attempting to influence macroeconomic policy. On the other hand, it is debatable whether all or even a majority of current farm policy features is outdated and counterproductive. Certain aspects of farm policy may need to be adjusted to operate more in the long-run interest of farmers and their cooperatives. That does not mean that farm programs, in general, should be scrapped.

Scrapping farm programs could be precisely the effect of the Gramm-Rudman balanced budget initiative. The unique impact of Gramm-Rudman on cooperatives and their members can now be specified. Moderate size farmers would be hurt the most by discontinuing current farm policy concepts (Smith). Cooperative membership tends to be dominated by moderate size farmers (Smith et al.). Cooperatives, therefore, are likely to be hurt the most by Gramm-Rudman.

The adverse effect of Gramm-Rudman on cooperatives will extend beyond

conventional farm programs. Cooperatives could be hurt most by a reduction of federal agricultural research and extension programs because they lack research programs and extension skills (French et al.). Publically supported cooperative research and education have already been cut to the bone. While the need to get the federal deficit under control is apparent, this can be accomplished by a tax increase, a reduction in spending, or a combination of the two. It is suspected that these differential impacts of macroeconomic policy on cooperatives have not been adequately considered.

Cooperatives are in a better position to influence macroeconomic policy than the general farm organizations because:

- It affects them more directly--particularly those involved in the export business.
- They understand the macroeconomic cause and effect relationships better. Direct exposure to the effects of changing currency values creates that understanding.

The Cooperative Interest is Unique

Farmers and their cooperatives must consider becoming more involved in both macroeconomic policymaking and farm policymaking. Cooperatives influence policy as individual firms, as members of cooperative trade associations, and as members of general agribusiness trade associations having all types of firms as members. Examples of such general agribusiness associations include the National Grain and Feed Dealers Association or the Milk Industry Foundation. The question then arises as to whether those trade associations having all types of firms as members, can represent cooperatives' interests in the farm program debate. The answer to that question is, *only partially.*

Several farm and macroeconomic policy impacts on cooperatives are either *unique*, or other agribusiness firms *have means of minimizing specific impacts that are not available to cooperatives*. Other major exporters have means of avoiding at least a portion of adverse impacts of the price support loan and farmer-owned grain reserve on the release of grain because they are multinational in scope. Other exporters should not be *as concerned* about the level of the loan rate as cooperatives. If major exporters are priced out of the U.S. market, they will ship from Argentina, Australia, Canada, Brazil, or the European Economic Community countries. Quite clearly, the cooperative interest is unique because U.S. cooperatives handle only U.S. commodities. While the concept of a multinational cooperative has been extensively discussed and analyzed, cooperatives appear to be several years away from achieving a multinational structure (Cook et al.).

Impact of Five Types of Government Programs on Agricultural Cooperatives

If family farmers are to survive without traditional farm programs, they must be given the tools of survival. Cooperatives are part of those tools. What other tools best complement and foster the formation of strong cooperatives that can better help their members survive?

Answering such a question requires an analysis that extends considerably beyond the conventional farm policy instruments that have been the focus of this analysis. The answer requires an analysis of the full range of policy choices--from little or no government involvement in agriculture through marketing boards. It requires an evaluation of the policies that have, in fact, fostered the strongest cooperatives.

This section identifies five types of government programs:

- government as a rule maker,
- government as a facilitator,
- government as a price supporter,
- government as a supply manager,
- government as a marketing monopoly.

In this section we examine the influence that each type of government programs has had on agricultural cooperatives. We utilized the experience of the authors in working with, observing, and researching the cooperative movement. Through this process it is hoped that impact of a wider range of policies and programs on cooperatives can become more focused.

Government as a Rule Maker: The Free Market Option

What Is It? When government simply defines the rules of trade, its only role is to see that a fair, open, and competitive environment exists for conducting business. This is a free market philosophy, but the government assures that the market is "free". Before the 1930s, farmers conducted their business in a free market tradition.

Where government establishes the rules of trade, economic laws prevail that affect marketing organizations, competition, pricing, products, promotion, and channel decisions. In the free market sector, public policies have centered on minimizing or eliminating monopoly and deceptive actions within the business community. Unregulated monopoly and deceptive actions are contrary to the interest of both consumers and business firms. Cooperatives are given the right to exist as are other business firms. Laws, thus, have been passed that are aimed at preserving cooperatives in a competitive market environment.

Under the free market, farmers have no price or income supports, production controls, controls affecting the volume or type of inputs used,

marketing orders regulating the handling or marketing of commodities, or marketing boards. Farmers depend directly upon market rewards for their income. They are, of course, influenced by macroeconomic policies but only in terms of their impact on economic growth, interest rates, and the value of the dollar.

Where Is It? This type of business economy prevails primarily in livestock and poultry. Specifically, commodities involved in the free market sector include beef, pork, lamb, goat, chickens, turkeys, geese, ducks, and eggs. Beef is included in this list with a recognition that the government has a special role in limiting the imports of this product--a deviation from the free market philosophy. Also included in this list are most *processed* fruits and vegetables. These include apples, avocados, grapes, nectarines, strawberries, plums, peaches, beans, broccoli, cabbage, cauliflower, sweet corn, cucumbers, celery, peppers, radishes, spinach, sweet potatoes, onions, and tomatoes.

Commodities included in the free market sector represent about 55 percent of the gross sales of agricultural commodities annually from U.S. agriculture. About 12 percent of the U.S. cooperatives handle these commodities, representing about 10 percent of the total annual cooperative business. This is less than 4 percent of all farm marketings.

Characteristics of Cooperatives: Cooperatives serving the free market sector of agriculture are generally relatively small and few in number (table 1).

While some cooperatives serving in this sector are fully integrated, others provide only first handler exchange functions (table 1). Cooperatives operating in the fruit and vegetable area tend to be more integrated than those in the livestock area. Fruit and vegetable processing coopera-

Table 1. Cooperatives Operating in the Free Market Where Government Establishes Only the Terms of Trade

Cooperative Name	Commodity
American Turpentine Farmers Assn.	Gum Rosin and Gum Turpentine
Blue Anchor, Inc.	Fruits, Vegetables
Blue Mountain Growers, Inc.	Fresh Fruit
Central California Lettuce Producers	Iceberg Lettuce
Central Livestock Association	Livestock
Empire Livestock Marketing Co-op Inc.	Livestock
Equity Co-op Livestock Sales	Livestock
Everglades Growers Cooperative	Fruits, Vegetables
Fruit Growers Marketing Association	Fruit
Gold Digger Apples Inc.	Apples
Guild Wineries & Distilleries	Wine, Brandy
Hamilton Farm Bureau Cooperative	Egg
Interstate Producers Livestock Assoc.	Livestock
Kern County Hay Growers	Hay
Livestock Cooperative Auction Assn. of New Jersey, Inc.	Livestock, Poultry, Eggs
Long Island Duck Farmers Co-op Inc.	Duck
Manson Growers Cooperative	Apples
Michigan Agri. Co-op Mktg. Assoc., Inc.	Fruits, Vegetables
Michigan Blueberry Growers Assoc.	Fruit
Michigan Livestock Exchange	Livestock
Mid-State Farm Cooperative Company	Poultry
Mississippi Livestock Producers Assoc.	Livestock
Mountain Orchard Cooperative Inc.	Fresh Fruit
National Grape Co-op Assn. Inc. (Welch)	Fruits, Vegetables
National Livestock Producers Assoc.	Livestock
Naturipe Berry Growers, Inc.	Fresh & Frozen Berries
Norbest, Inc.	Turkey
Northeast Egg Marketing Association	Eggs
Oregon Turkey Growers	Poultry
Outwest Bean, Inc.	Dried Beans, Popcorn, Vegetables
Oxnard Frozen Food Cooperative	Vegetables
Pacific Coast Producers	Fruits, Vegetables
Producers Livestock Association	Livestock
Producers Livestock Marketing Assn.	Livestock
Producers Marketing Association, Inc.	Livestock
Pro-Fac Cooperative Inc.	Fruits, Vegetables
Rockingham Poultry Mktg. Co-op Inc.	Fresh Fruits
Salinas Lettuce Farmers Cooperative	Vegetables
Stockton District Kidney Bean Assoc.	Livestock
Tree Top, Inc.	Apples and products
Tri Valley Growers	Fruits, Vegetables
Trout, Inc.	Apples
West Central Turkeys, Inc.	Turkeys
Winchester Apple Growers Association	Apples
Yakima Valley Grape Producers, Inc.	Grape and Apple Juice

tives primarily provide processing functions for national brand distributors and private labels products to supermarkets. Generally, these cooperatives have a tough time competing in the consumer and institutional markets with their own brands. An important exception to the rule is Welch (National Grape) which has built its predominantly grape marketing business on a sophisticated market-oriented approach involving a high level of producer commitment and pooling.

Some cooperatives in this sector have limited their operations to bargaining. As such, they have been satisfied to leave the marketing management control functions to the proprietary sector, limiting their operations to negotiating terms of contracts on behalf of producers.

The number of cooperatives serving the livestock, poultry, and processed fruits and vegetables without marketing orders continues to decline. With very few exceptions, there have been no dramatic increases in the size of the cooperative business during the last two decades.

As in the past, it is in the livestock sector that cooperatives can probably expect the most vigorous proprietary corporate competition in the future. Two regional cooperatives, Farmland Industries and Land O' Lakes, entered the beef packing, fabrication, and marketing business. Both have terminated this business. The lesson learned is that it is risky for cooperatives to enter into the integrated livestock business without member commitment (marketing agreements) and investment. Traditionally, cattlemen have not been willing to enter into long-term marketing contracts. Cooperatives, likewise, have tried to adopt the open market procurement system that characterizes the corporate sector. Cooperatives can succeed in livestock integration and marketing only if they develop a unique integrated cooperative system.

It is the committed integrated system that uniformly characterizes strong cooperatives operating in a free market. These include Welch (National Grape), Tri Valley Growers, Pro-Fac, and Tree Top (table 1). While commitment does not assure success, it certainly has been proven to be an important, if not essential, ingredient.

Government as a Facilitator: The Marketing Order Option

There is a sector of American agriculture that is regulated, with regulations proposed and recommended by producers themselves. The Secretary of Agriculture, under the authority of the Agricultural Marketing Agreement Act of 1937, issues regulations based on these producer recommendations. The role of the government is to reflect producer needs by facilitating orderly marketing.

What Is It? This form of government program is identifiable by the existence of a marketing order. In most instances the marketing order is accompanied by a marketing agreement which is issued when handlers of 50 percent or more of the commodity covered have signed an agreement with the Secretary of Agriculture. Producer groups, including cooperatives, are the motivating force behind proposed marketing orders. A marketing order is established any time the required number of producers vote favorably for it in a referendum. A marketing order is binding on all handlers covered by it. The law allows a cooperative to vote for all of its membership (bloc vote) in referenda on a proposed order or an amendment of existing order. Former agriculture secretary John Block asked cooperatives to refrain from bloc voting because of the powerful controlling interest it gives cooperatives.

Marketing orders are used to regulate the quality of fruits and vegetables (table 2). These orders are accomplished by establishing a minimum

Table 2. Federal Marketing Orders for Fruits and Vegetables with Quality Control Provisions, January 1, 1986.

Area and Commodity	Year Initiated
Fruits:	
Florida citrus	1939
Texas oranges and grapefruit	1960
Florida avocados	1954
California nectarines	1958
California pears, plums, and peaches	1939
Georgia peaches	1942
Colorado peaches	1956
California kiwi fruit	1984
Washington peaches	1960
Washington apricots	1957
Washington sweet cherries	1957
Washington-Oregon fresh prunes	1960
Pacific coast winter pears	1939
Hawaii papayas	1971
Washington-Oregon Bartlett pears	1965
California olives	1965
Vegetables:	
Idaho-E. Oregon potatoes	1941
Washington potatoes	1949
S. Oregon-N. California Potatoes	1942
Colorado potatoes	1941
Maine potatoes	1954
Virginia-N. Carolina potatoes	1948
Idaho-E. Oregon onions	1957
South Texas onions	1961
Rio Grande Valley (Texas) tomatoes	1959
Florida tomatoes	1955
Texas melons	1979

grade, size, or maturity of the commodity which can be shipped in regulated trade channels. Grade and size regulations keep low quality produce off the market. As such, grade and size regulations indirectly affect the quantity marketed.¹⁰ Quality regulations are changed periodically to maximize the marketing of all fruits and vegetables suitable for fresh consumption and to meet market needs.

Some federal marketing orders contain volume management or market flow provisions for selected fruits and vegetables (table 3). These orders use prorates (usually for weekly periods), reserve pools and shipping holidays to tailor supplies to anticipated market demand. The authorization is contained in the orders, while the specific volume management or market flow recommendation is made by producers.

The purpose of market flow regulations is to avoid market gluts or shortages by stabilizing the volume of shipments moving to market. This is done by handler allotments. Another market flow regulation allocates supplies between primary and secondary markets. Excess production under this plan is diverted to reserves which are usually channelled into export markets. Market flow regulations work best for storable commodities.

Orders can also specify standards of containers or packs. They can prohibit methods of competition and trade practices which are considered to be unfair. In addition, orders can be used to require price posting. Under this authority, handlers may be required to file their selling prices and give advanced notices before changing them.

Federal milk marketing orders regulate the pricing of Grade A milk

¹⁰The direct volume control programs, including producer allotments, market allocations, prorates and reserve pools, are treated in this paper under the heading "Government as a Supply Manager".

Table 3. Federal Marketing Orders with Volume Management or Market Flow Provisions, 1984.

Area and Commodity	Year Initiated	Volume Management	Market Flow ¹
Fruits:			
California-Arizona navel oranges	1953	---	P
California-Arizona valencia oranges	1954	---	P
California-Arizona lemons	1941	---	P
Florida limes	1955	---	H, P
Indian River (Florida) grapefruit	1962	---	P
Florida Interios grapefruit	1965	---	H
California desert grapes	1980	---	H
California Tokay grapes	1940	---	H, P
Tart cherries - 8 states	1971	R	---
Vegetables:			
South Texas lettuce	1960	---	---
Dried Fruits and Nuts:			
California almonds	1950	M, R	---
Oregon-Washington filberts	1949	M	---
Pacific coast walnuts	1948	M, R	---
California dates	1955	M	---
California raisins	1949	M, R	---
California prunes	1949	R	---

¹Symbols for the various provisions are defined as follows:

G=Minimum grade requirement
 S=Minimum size requirement
 M=Market allocation provisions
 P=Prorate. Prorate periods are
 1 week except for Tokay grapes
 (3 days) and Florida celery
 (unspecified)

R=Reserve pool provision
 A=Producer allotment provision
 H=Shipping holiday
 ---indicates that the
 order does not
 authorize the indicated
 type of provision.

for a specified market area. Milk orders require:

- Handlers to pay no less than a certain minimum price for milk used for different purposes (fluid, ice cream, cheese, etc.).
- That payments be pooled and paid to individual farmers or cooperative associations of farmers on the basis of a uniform or average price.

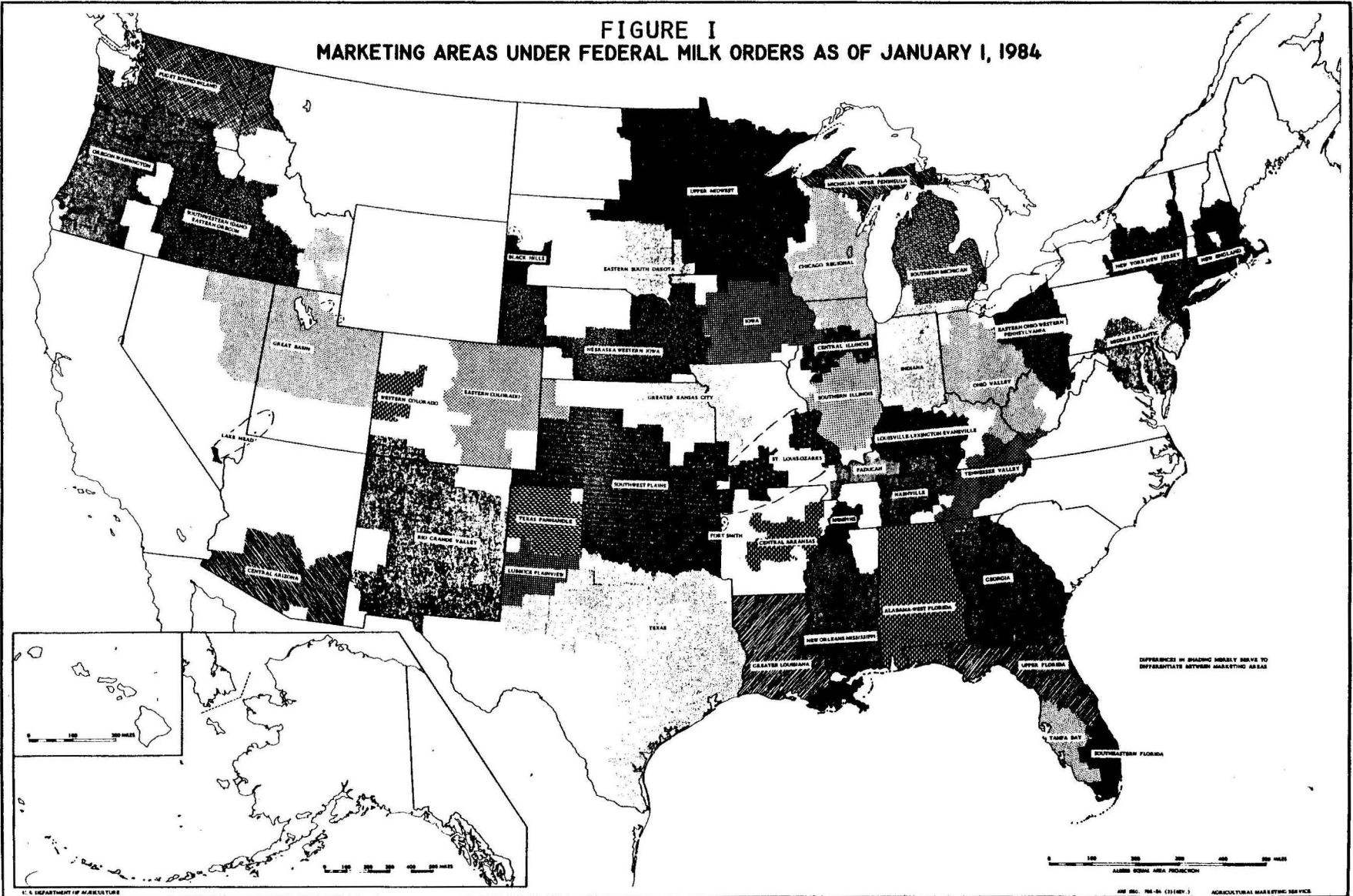
Orders also assure producers of accurate weighing, testing, classification, and accounting for milk.

Milk marketing orders, once issued by the Secretary of Agriculture, are regulatory and are directly administered by USDA. Fruit and vegetable orders are administered by an administrative committee which proposes regulations for the Secretary of Agriculture to issue. The administrative committee is made up primarily of producers who are regulated by the order. Business affairs of a fruit and vegetable market order are managed by the committee and its staff.

An assessment on handlers is used to finance the marketing order program. The order administrator and staff compile statistical and shipping information which is useful to individual growers and handlers in making their marketing decisions. The proceeds may also be used for production research, marketing research, and development projects if provided for in the order. Such provisions improve production, marketing, distribution, and consumption of the commodity being regulated.

Where Is It? Marketing orders are used for approximately 85 percent of Grade A milk marketed in the United States (figure 1) and for the fruit and vegetables listed in tables 2 and 3. The dairy, fruit, nut, and vegetable sectors of agriculture operating under facilitative, quality-oriented marketing orders, generate approximately *one-sixth* of all

**FIGURE I
MARKETING AREAS UNDER FEDERAL MILK ORDERS AS OF JANUARY 1, 1984**



cash receipts from farming. These sectors are served by *one-tenth* of the cooperatives but do *28 percent* of the cooperative business. This represents 12 percent of all farm marketings.

Characteristics of Cooperatives: While the number of cooperatives engaged in the marketing order sector of agriculture is relatively few, they are usually quite strong (table 4). This is best illustrated by such cooperatives as Calavo Growers of California, Sun-Diamond, Sunkist, and Land O'Lakes.¹¹ These cooperatives tend to be both market and brand oriented. Producers tend to be committed to the cooperative; that is, there is a contract that obligates the producer to deliver and the cooperative to accept. The operators of large farms tend to be members of cooperatives that operate under marketing orders. This is particularly the case where the cooperative has developed a strong marketing program.

Even without extensive brand orientation, several dairy cooperatives have developed commanding positions in the regions they serve. Examples include AMPI; Mid-American; Dairymen, Inc.; Milk, Inc.; and Mountain Milk. Cooperatives are stronger with federal milk marketing orders than with state milk marketing orders, because state orders tend to be more processor and independent producer oriented. In addition, state orders tend to confine the scope of cooperative activity to the state involved.

Government As a Price Supporter

The government has directly supported prices of some agricultural products for nearly 40 years through the operation of various price support programs.

¹¹Milk cooperatives also operate with a price support program. The influence of price supports on milk cooperative strategies, strengths, and weaknesses is discussed later.

Table 4. Cooperatives Having Marketing-Orders

Fruit and Vegetable Cooperatives Having Quality Control Orders

Blue Chelan Inc.	Oroville Cordell Fruit Growers
Blue Star Growers Inc.	Pacific Coast Producers
Calavo Growers of California	Peshostin Fruit Growers Association
California Citrus Producers Inc.	Peshostin Hi-Up Growers, Inc.
California Treestone Peach Assn.	Plymouth Citrus Growers Association
Cariboa Growers Inc.	Potato Growers of Idaho
Cascoa Growers	Pure Gold Inc.
Chief Tonasket Growers	Regal Fruit Cooperative
Colorado Potato Growers Exchange, Inc.	Seald-Sweet Growers, Inc.
Cowiche Growers Inc.	Silver Springs Citrus Cooperative
Edinburg Citrus Association	Skookum Inc.
Golden Gen Growers Inc.	Snokist Growers
Leavenworth Fruit Company	Starcrisp Inc.
Livingston Farmers Association	Sunkist Growers Inc.
Linsay Olive Growers	Texas Citrus Exchange
MAGI Inc.	Washington Fruit Growers
Maine Potato Growers, Inc.	Wenatchee-Wenoka Growers Inc.
Methow Pateros Growers	Wenoka Sales
Mr. Papaya Co-op	

Fruits and Vegetable Cooperatives Having Volume Management and Market Flow Orders

California Almond Growers Exchange	Ocean Spray Cranberries Inc.
California Citrus Producers Inc.	Sun-Diamond Growers of California
Lindsay Olive Growers	Sunkist Growers Inc.

Major Dairy Cooperatives Having Marketing Orders

Agri-Mark, Inc.	Land O'Lakes, Inc.
Associated Milk Producers, Inc.	Maryland-Virginia Milk Producers
Cal-Dari, Inc.	Michigan Milk Producers Association
Capital Milk Producers Cooperative, Inc.	Mid-America Dairymen, Inc.
Challenge Dairy Products, Inc.	Milk Marketing, Inc.
Consolidated Badger Cooperative	Mountain Empire Dairymen's Association, Inc.
Dairyland Cooperative Creamery	Prairie Farms Dairy, Inc.
Dairylea Cooperative, Inc.	Upstate Milk Cooperatives, Inc.
Dairymen's, Inc.	Wisconsin Dairies Cooperatives
Interstate Milk Producers Cooperative	

What Is It? The government supports the price of major grains and cotton through the price support loan program. For dairy products and honey, it stands ready to purchase commodities offered to it at the support price. Loan rates and the willingness to buy have resulted in the government storing most of the surplus grains, cotton, honey, and dairy products. Cooperatives qualifying for Form G can offer producers' grain to the Commodity Credit Corporation under the price support loan program.

Where Is It? Price support programs currently exist for feed and food grain programs, primarily corn, sorghum, wheat, rice. In addition, prices are supported for peanuts, soybeans, cotton, honey, sugar, wool, mohair, and milk. Form G loans are available on all price supported grains and cotton.

Commodities with government price support programs constitute approximately 48 percent of U.S. cash farm receipts, with milk included. Seventy-three percent of U.S. cooperatives serve this sector, accounting for 39 percent of the U.S. cooperative dollar volume. These cooperatives account for about 19 percent of gross farm marketings.

Characteristics of Cooperatives: Cooperatives dealing in price support commodities are among the largest in the United States. Major cooperatives that characterize this group are listed in table 5. Most grain and cotton cooperatives sell most of the commodities they purchase to private grain and cotton companies who do most of the exporting. Producers make the marketing decisions in grain cooperatives, except in rice where a committed system prevails. Grain cooperatives are assembly-oriented, storage-oriented, and government-oriented. They are not brand and product-oriented as are cooperatives handling commodities where the government acts as a facilitator.

Table 5. Some of the Major Cooperatives Handling Price Supported Commodities.

GRAINS:

American Rice, Inc.
 Farmers Rice Cooperative
 Harvest States
 Riceland Foods
 Rice Growers Associations of California
 Union Equity Cooperative Exchange

COTTON:

Amcot, Inc.
 Calcot, Inc.
 Plains Cotton Cooperative Association
 Southerwestern Irrigated Cotton Growers Association (SWIG)
 Stapl Cotn

WOOL, MOHAIR:

Mid-States Wool Growers Association
 National Wool Marketing Corporation
 Utah Wool Marketing Association
 West Virginia Wool Marketing Association

HONEY:

Sioux Honey Association
 Valley Honey Association

SUGAR:

American Crystal Sugar
 California Beet Growers Association, Limited
 California and Hawaiian Sugar Company
 Glades County Sugar Growers Cooperative Association
 Iberia Sugar Cooperative Inc.
 Louisiana Sugar Cane Products, Inc.
 Sugar Cane Growers Cooperative of Florida
 United Cane Planters Cooperative

PEANUTS:

GFA Peanut Association
 Peanut Growers Cooperative Marketing Association

While dairy cooperatives are stronger by virtue of marketing orders, price supports reduce their incentives to acquire market power. This is the case largely because the price support program has been relied upon to manage inventories--as is also the case in grain, cotton, wool, and honey. With CCC standing ready to purchase surplus commodity stocks, cooperatives have little incentive to manage their own inventories. As a result, dairy cooperatives tend to be less market-oriented than fresh fruit and vegetable cooperatives that operate only with a marketing order having no volume controls.

Government as a Supply Manager

For some agricultural commodities, government programs stringently control the quantity of product that can be produced or marketed.

What Is It? The supply of selected commodities is controlled either by separate legislation or by marketing order regulations through policy instruments such as market allotments, prorates, or reserve pools. Usually the volume restricted is on an allotment or quota basis, unrelated to grade, quality, or maturity. Benefits from these programs accrue to producers in the form of higher product prices and inflated asset values.

Where Is It? A separate government program exists for tobacco. Marketing orders are used to control the volume of hops, spearmint oil, and Florida celery (table 6). Voluntary supply management programs have periodically been used in major grains, cotton, and milk.

About one percent of the cooperatives handle commodities where the government acts as a supply manager. These cooperatives account for 1.5 percent of the net volume in cooperative marketing.

Characteristics of Cooperatives: Cooperatives with separate supply control legislation, as in tobacco, are few and weak (table 7). They are essen-

Table 6. Federal Marketing Orders With Producer Allotment Provisions, 1985.

Area and Commodity	Year Initiated	Volume Management	Market Flow ¹
Fruits:			
Cranberries - 10 states ²	1960	A,M	---
Vegetables:			
Florida celery	1965	A	H,P
Dried Fruits & Nuts:			
Far West Spearmint oil	1980	R,A	---
Idaho, Washington, Oregon and California hops ³	1966	R,A	---

¹Symbols for the various provisions are defined as follows:

A=Producer allotment provision

H=Shipping holiday

M=Market allocation provisions

P=Prorate. Prorate periods are 1 week except for

Tokay grapes (3 days) and Florida celery (unspecified)

R=Reserve pool provision

²Not utilized in last decade

³Terminated December 31, 1985, but reinstated by USDA

tially first handlers of commodities and are relatively unsophisticated in marketing methods. These cooperatives tend to be instruments of the program rather than possessing market management characteristics. The cooperatives are generally older, with no new cooperatives being started in recent years. There is a tendency for the cooperatives to be heavily reliant on the program.

Cooperatives handling commodities with producer allotments under federal marketing orders also tend to be relatively small except for Ocean-Spray Cranberries, Inc. This cooperative serves cranberry producers in 10 states and has marketing management capabilities in both fresh and processed products.

Government as a Marketing Monopoly: The Marketing Board Option

While the United States established marketing orders in response to depressed and uncertain agricultural prices during the 1930s, the British Commonwealth countries established marketing boards.

What Is It? Marketing boards are producer-oriented organizations established under government legislation which gives the board various legal powers over producers. In some instances, marketing boards have control over manufacturers and handlers of primary or processed agricultural commodities. Each board centers on one commodity. Boards are primarily involved in developing and providing export sales. *They generally do not control production.*

Where Is It? There are no marketing boards in the United States, but they do exist among our world market competitors including Canada, Australia, New Zealand, South Africa, and Sweden.

Characteristics of Cooperatives: Cooperatives operating with marketing boards usually do the assembly, drying, and storage. These cooperatives

Table 7. Cooperatives Operating With Government as a Supply Manager

Tobacco:

Burley Tobacco Growers Cooperative Association
Burley Stabilization Corporation
Carolina Farmers Cooperative Warehouse Inc.
Conn-Mass Tobacco Cooperative Inc.
Cooperative Warehouse Inc.
Farmers Burley Co-op
Farmers Buley Corporation
Farmers Cooperative Warehouse, Inc.
Flue-Cured Tobacco Cooperative Stabilization Corporation
Growers Warehouse, Inc.
North State Farmers Cooperative
Old Belt Farmers Cooperative
Stemming District Tobacco Association, Inc.
Sun-Cured Tobacco Marketing Cooperative Inc.
Virginia Dark-Fired Tobacco Growers Marketing Association, Inc.
Western Dark Fired Tobacco Growers, Association, Inc.
Western District Warehousing Corporation
Wisconsin Cooperative Tobacco Growers Association

Others: (Products with Producer Allotment Provisions)

Ocean-Spray Cranberries, Inc.
Pioneer Growers Cooperative
Washington Mint Growers Assn.

generally do not engage in market management. They generally provide the load out services and accommodate flow to market as scheduled by the marketing board. In the domestic market, these cooperatives tend to take on much the same posture as U.S. grain cooperatives. Overall, however, they are less involved in marketing.

An exception to the rule is the Swedish cooperatives that are directly integrated into or effectively controls the operation of the board. Without this direct integration, conflict tends to develop between the marketing board and the cooperative.

Marketing boards tend to be highly politically-oriented. The government is often represented on the board. Those who strongly support marketing boards feel that the board can do everything that farmers need done as well as protect them from depressed prices. These supporters of the marketing boards question the need for cooperatives beyond the facilitative functions that are generally performed by them.

Conclusions and Implications

Many factors affect the success of cooperatives in managing the markets in which they operate. One of these factors is the level and type of cooperative involvement in agriculture. The following conclusions can be drawn regarding the differential impact of government programs on cooperatives.

- The heavier the government involvement, generally the weaker the cooperative. This may be the case because high levels of government involvement require lower levels of financial and business support by producers. This motivates producers and their cooperatives to become government program-oriented rather than market-oriented. That is, there is greater incentive to store

grain, cotton, or dairy products than to market them. If there were less effort and financial resources spent on getting the desired levels of price and income from the government, farmers would put more emphasis on marketing. If farmers sell to the government at a higher price than the market, they will opt for government sales. They will look to the government rather than the marketplace as their source of survival.

- The strongest cooperatives appear to be in the sector where the government only acts as a facilitator of marketing. Under marketing orders, needed regulations are recommended by producers themselves. These regulations do not perform the job of marketing for producers. They do not assure producers a market. In the case of fruit and vegetable marketing orders, they do not even assure farmers a minimum price.

Marketing orders provide tools by which farmers can exercise a degree of supervised control over the markets in which they operate. They provide a uniform set of rules by which farmers and marketing firms can operate. Cooperatives still are required for effectively carrying out the marketing function and maximizing farmer benefits. The effect of fruit and vegetable quality regulations, for example, is to prohibit the shipment of poor grades and small sizes. These qualities tend to be discounted by consumers in the prices they pay.

Cooperatives play an important role in reflecting to the administrative committee consumers' quality preferences. With this knowledge, they can signal the need for changes in quality regulations. Volume management and market flow regulations under market-

ing orders are usually adjusted weekly to stabilize shipments moving to market.

The income of farmers with quality control, volume management, and market flow marketing orders comes solely from the marketplace, thus the incentive to invest and commit to this type of marketing cooperative is stronger. If either the cooperative or its producer members attempt to utilize the order for controlling production, the cooperative tends to be weakened because neither the cooperative nor its members are any longer regimented by market prices.

- Producers are most apt to enter into marketing agreements with cooperatives where the government acts as a facilitator. In this situation, success of the cooperative's market management role is critical to members' prosperity. Members are more willing to meet both their cooperative's and their own success criteria when their income comes solely from the marketplace.
- One might expect the strongest cooperatives to exist in sectors where the government merely provides rules of trade, but that is not the case. Government's role in livestock and poultry is largely limited to establishing the rules of trade. Livestock producers have traditionally been independent in procurement and marketing. They seldom attempt to challenge the large meat packers and marketers. Where cooperatives have entered the beef and pork industry, they have done it on an uncommitted basis, largely without member support. This has resulted in high leveraging of the cooperative's net worth and eventual failure. The members have not given their cooperative the tools of survival.
- Cooperatives serving those commodities with price and income support programs can expect further deterioration in their market

position. The need to centralize grain and cotton marketing among cooperatives has never been fully realized. The fault lies largely with producers who are more interested in farming the farm program than the farm. If farmers see no need for improving the structure and operations of marketing cooperatives, cooperative management will not undertake it. In short, if the farmer's income is determined primarily in Washington, there is little incentive to improve the marketing machinery that determines how much money comes from the marketplace. Grain cooperatives are caught in this web of producer indifference.

- A marketing board policy would also tend to weaken the role and structure of agricultural cooperatives. This is due to the board's tendency to usurp a large part of cooperative's marketing function. Exceptions are cases where the board functions are integrated into and effectively controlled by the cooperative. Such a board, in essence, operates as a marketing order.
- It will take a mountain of cooperative leadership to shake producer indifference that results from the protection afforded by government programs. Gramm-Rudman could be the force that begins to move that mountain.
- In recent years, questions have been raised as to whether or not marketing orders serve a public interest. This study indicates that some of the strongest cooperatives handle commodities with marketing orders. These orders serve the role of managing supplies in accordance with market needs. This affords an opportunity for the cooperative to engage in more advanced beneficial marketing management activities. These more sophisticated marketing techniques serve as models for all cooperatives. When marketing orders involve the heavy hand of government controls over production, how-

ever, cooperative strength tends to decline.

The Need for Clearly Defined Cooperative Policy Goals

One of the most basic cooperative needs, that even transcends the policy issue, is to identify the goals of its members and its cooperative. What do members expect of their cooperative? Are they simply an alternative market--just another firm competing for farmers' business? Or is the cooperative the marketing and input supply arms of farmers? Is it to be held accountable if the family farm dies as an American institution? If so, the cooperative must have the tools by which it can effectively market on behalf of the farmer. Present policy, by all standards, does not give cooperatives those tools. Equally important, cooperatives are not fully utilizing those aspects of policy that are beneficial to them--such as the Form G loan.

The goals cannot just be the very broad, albeit important, ones. They must also include specific operational goals. How big a factor do farmers want their cooperatives to be in the export market? Do they expect their cooperatives to be innovative in developing new marketing alternatives and systems? Do they expect them to be competitive with the major grain companies, or just suppliers to them? *Such goals have specific farm policy implications.*

Principles of a Cooperative Oriented Farm Policy

From the process of establishing goals, it is possible to develop certain principles that could serve as the basis for developing a cooperative-oriented farm policy. Such guiding principles should be developed and agreed upon prior to getting involved in the specific program issues (target prices, price supports, marketing loans, reserves, marketing orders, etc.). Some possible principles that could serve as a point of departure for discussion include:

- Commodities should be readily available for marketing. They should not be tied up in government programs. At a minimum, provisions should exist in these programs that encourage release--not discourage it.
- The degree of production stimulus (or restraint) provided by farm programs should be responsive to market needs. Neither overproduction nor underproduction should be encouraged.
- The government's role is to stabilize and expand markets. Policies that do otherwise are not productive.
- Farm income should be maintained at a level that prevents widespread financial difficulty for commercial farmers but encourages efficiency in production. U.S. agriculture cannot compete with policies that hold inefficient, high cost farmers in production. Small, inefficient farmers may require a separate farm policy.
- Farm programs should encourage and facilitate the development of a market-oriented producer and cooperative strategy. Cooperatives that depend on government for their survival are as useless as farmers who depend on government for their survival.
- Members should experience the rewards of cooperative activity. If they do not, the members will become nonmembers.
- Farm programs should encourage and support an owner-operator structure of producer agriculture.

Certain specific policy options fall out of such principles. Such options include:

- Marketing loans should be adopted on a broad commodity basis. If not a marketing loan, the support level should be set materially below the prevailing market price.
- Target prices should be continued and expanded to milk, but keep target price levels responsive to market forces. The target price

and milk support price level should be set on the basis of the variable or out-of-pocket cost of producing individual products. This may be necessary to control the level of spending on farm programs.

- Increased incentives should be provided for release of commodities out of the regular loan, the farmer-owned grain reserve, and even CCC stocks. Either the marketing loan or a limit on the availability of the loan would accomplish this objective.
- Supply-demand balance indicators should be used to trigger the use of production control programs. With lower support price levels and reasonable target prices, production control triggers may not be necessary.
- The use of Form G loan and pooling should be expanded.
- The cost sharing program concept developed in milk should be applied to other commodities.
- Marketing orders should be expanded as an adjunct to cooperatives' overall marketing strategy.
- Separate policy instruments for new young farm entrants and for smaller commercial farmers should be considered.
- Cooperatives should actively promote balanced use of monetary and fiscal policy tools.

Cooperative: A Key to Moderate Size Farm Survival

If family farmers are to survive as an institution, they must be given the tools for survival. Precisely the same thing can be said for cooperatives. In fact, the survival of family farms and cooperatives is intertwined. A farm policy designed to preserve one must preserve the other.

Moderate size commercial farmers need cooperatives to survive. They need them to procure supplies and market outputs. They need them to

transfer part of the marketing margin back to producer members. They need to generate a countervailing influence in the market place.

Government programs and other assistance should not destroy cooperatives, or discourage members supporting them. Traditional farm programs tend to do both. Farm programs should be so designed as to encourage the farmer to secure his livelihood out of the market place. Farmers should drop out of farming in response to signals generated by the market place, not the signals sent out by the farm programs.

Farm programs should encourage farmers to help themselves through their cooperative. Farmers should not secure their income from the government. Government should so position the farmer that he is encouraged to build the procurement and marketing capability to help himself in the marketplace.

Considerable educational effort will be required to create an understanding of the role of both public policy and cooperatives in determining the future structure of agriculture. Cooperatives will need to instill in their members an understanding of how farm policy affects cooperatives. This will require an understanding of cooperatives' marketing plan. Members will also need to develop an understanding of how their interest in policy is different from those farmers who choose not to market cooperatively. Cooperatives likely cannot perform this educational function by themselves. Land grant economists will need to get more involved in cooperative education programs.

Theoretically, if cooperative members understand the impact of farm policies on them and their cooperatives, they should be able to reflect this interest through their existing farm organizations. This would require a very politically active membership. *Realistically, the interests of cooperative members would be most effectively reflected in the policy process if cooperatives, themselves, become more directly involved in farm policymaking.*

References

- Black, W. E., and Ronald D. Knutson. *Texas Farmer Cooperative Principles*. (College Station, Texas Agricultural Extension Service B-1367, July 1981).
- _____. *Texas Farmer Cooperative: Response to Change*. (College Station, Texas Agricultural Extension Service B-1430, November 1982).
- _____. *Texas Attitudes and Opinions of Texas Agricultural Cooperative Members*. (College Station, Texas Agricultural Extension Service B-1483, August 1984).
- _____. *Texas Agricultural Cooperative Board Chairmen*. (College Station, Texas Agricultural Extension Service B-1525, March 1986).
- _____. *Agricultural Cooperatives' Self Inflicted Wounds*. (College Station, Texas Agricultural Extension Service, April 1986).
- French, Charles E., John C. Moore, Charles A. Kraenzle, and Kenneth F. Harling. *Survival Strategies for Agricultural Cooperatives*. (Ames, Iowa State University Press, 1980).
- Guither, Harold D., Bob F. Jones, Marshall A. Martin, and Robert G. F. Spitze. *U.S. Farmers Views on Agricultural and Food Policy*. (Urbana, University of Illinois, December 1984).
- Knutson, Ronald D., Michael Cook, and Thomas L. Sporleder. *Assessment of International Cooperative Coordination*. (College Station, Texas Agricultural Market Research and Development Center, Texas A&M University, 1979).
- Schuh, Edward G. "U.S. Agriculture in the World Economy." *Farm Policy Perspectives: Setting the Stage for 1985 Agricultural Legislation*. (Washington D.C.: Committee on Agriculture, Nutrition and Forestry, United States Senate, April 1984, p. 47).
- Smith, Edward G. "Economic Impact of Current and Alternative Farm Programs on Farm Structure on the Southern Texas High Plains." Unpublished Ph.D. dissertation, (College Station, Texas A&M University, 1982).
- Smith, Edward G., James Richardson, and Ronald D. Knutson. *Economics of Size in Cotton Production and Marketing on the Texas High Plains*. (College Station: Texas Agricultural Experiment Station B-1475, 1984).

