

Supply Management Program Alternatives

For the Tart Cherry Industry*

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Abstract

Two interrelated supply problems facing the tart cherry industry are long-run cyclical patterns in industry productive capacity and substantial annual supply fluctuations. Following the termination of a federal marketing order in effect for 14 years, the industry has considered a number of other supply management options. None have been adopted on a broad industry basis. Recent proposals involved formation of a multi-state supply management cooperative and use of a state marketing order in Michigan. Annual supply management alternatives include reserve pool, market allocation, and non-harvest. An orchard removal incentive program was proposed to reduce industry productive capacity.

Introduction

Perennial crop industries often face special challenges in coordinating supplies with demand. Significant challenges in a number of perennial crop industries stem from the simultaneous operation of two overriding supply phenomena: (1) long-term changes in acreage and industry productive capacity relative to demand that may lead to periods of over-production and under-production, and (2) annual supply fluctuations which are primarily related to weather conditions.

The U.S. tart cherry industry has grappled with these interrelated supply problems for several decades. Supply management programs that have been discussed and developed by the industry over the years to deal with these problems have

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involved the joint efforts of growers and processors. One such program, a federal marketing order with supply management provisions, was in effect from 1972 to 1986. Several other proposed programs for supply management have been considered by the industry over the years, but have not been adopted on a broad industry basis.

Persistently large supplies and resulting low prices, which had a significant negative impact on the industry during the late 1980s, led to new concerted efforts by the cherry industry to develop an effective supply management program. For example, in 1990 and early 1991, tart cherry industry leaders proposed a combination of several program components to deal with their supply problems. These proposals involved creation of a special multi-state supply management cooperative that would operate either by itself or in combination with a proposed state marketing order in Michigan, the largest producing state.

This report explores certain aspects of recent tart cherry industry proposals for supply management programs. Although the primary emphasis is on several industry proposals that were considered in 1990 and 1991, the report also examines the operation of the federal marketing order and several other proposals considered after the termination of the marketing order in 1986. The tart cherry industry experience in developing supply management program proposals may provide useful case study examples of interest for some other perennial crop commodity industries that also are challenged by industry supply-demand balancing problems.

The Nature of Tart Cherry Supply Problems

The tart cherry market faces two major interrelated supply problems: (1) long-run cyclical patterns in industry productive capacity and (2) significant annual supply fluctuations. Bearing acreage has exhibited a cyclical pattern over several decades. In contrast, annual production varies substantially from year to year because yields rise and fall due largely to climatic factors such as spring freezes.

Annual fluctuations in tart cherry production are perhaps the most volatile of all U.S.

perennial crops. The percentage change in annual production has been as high as 54 percent, and was in the 30-40 percent range in a number of years. Over the period 1965-1990, the annual percentage change in cherry production averaged 17 percent, which was higher than the comparable percentage changes in U.S. production for a number of other perennial crops including hazelnuts (16%), almonds (15%), raisins (10%), sweet cherries (9%), blueberries (8%), freestone peaches (7%), nectarines (5%), and apples (4%). Year-to-year change is measured as a percent of average production for each pair of adjacent years.

A key result of annual supply fluctuations is that very low grower prices often occur in large crop years and quite high prices in short crop years. This is related to the fact that cherry demand is inelastic, especially at the farm level, and significant demand expansion is not easily achieved within a period as short as one year. The supply volatility and fluctuating prices in turn hamper longer-run demand expansion.

One of the results of the long run cyclical pattern of bearing tart cherry acreage is alternating periods of industry over-capacity and under-capacity interspersed with periods of approximate balance of industry productive capacity with demand. The period 1976-1983 can be characterized as a period of general under-capacity in the industry in relation to potential demand, with frequent short crops and unusually high prices received for cherries. Growers responded to high prices during this short supply period with substantially increased plantings, resulting in a period of chronic over-capacity a few years later during the period 1984-1990.

Although short crops in 1990 and 1991 provided a respite from persistently excessive supplies, it remains to be seen if the recent period of industry overcapacity has ended. Data from a recent orchard survey suggest that the challenges of industry over-capacity may continue for a few more years. Although it is clear that the short crops in 1990 and 1991 are partially due to weather-induced short-run fluctuations, opinions differ within the industry on whether the industry's productive capacity during the next few

years will be excessive or in approximate balance with demand.

An industry-conducted Michigan orchard survey in 1990 provided recent data on tree numbers and ages of cherry orchards. Using estimated yields by age of tree average production was projected to exceed estimated levels of consumption for several more years.

Industry Approaches To Deal With Supply-Demand Imbalances

The market price system plays the overall primary role in coordinating supply and demand for tart cherries as for all commodities in a market-oriented economy. However, reliance on market prices alone in the face of severe supply-demand imbalances may lead to less than ideal market performance, particularly from the growers' perspective. The effect on tart cherry production and market supplies from the combination of weather-induced annual fluctuations in yields and the longer-run cyclical nature of bearing acreage often sends confusing market signals to the industry, especially to growers.

Over the years the tart cherry industry has discussed and developed various programs to supplement and influence the basic role of market prices. Two fundamental categories of approaches to deal with long-term supply-demand imbalance are demand expansion and supply management.

Demand Expansion

For over 40 years the tart cherry industry has had ongoing industry-wide demand expansion programs, including generic promotion. These programs supplement the advertising, promotion and marketing efforts of individual processing firms. A number of people in the tart cherry industry favor industry-wide collective action for both supply management and demand expansion, while others argue in favor of demand expansion only and oppose most or all supply management program proposals. Although there have been some controversial issues from time to time regarding industry-wide promotion programs, cherry industry demand expansion programs have

generally enjoyed widespread support within the industry.

A key impact of severe annual supply fluctuations is the constraint that the fluctuations can pose for effective demand expansion. During the 1970s and early 1980s the unreliability of supplies and sharply fluctuating prices experienced by the cherry industry influenced some food manufacturers to drop cherries from their product lines and/or to de-emphasize promotion and marketing of cherry products. These actions by food manufacturers in response to supply volatility constrain demand for processed cherries.

There may be considerable potential for expanding demand for cherries over a period of several years when production capacity is large, leading to large supplies over a multi-year period. On the other hand, history has shown that during the large acreage-production phase of the industry's long-term cycle, production capacity tends to overpower the moderate amount of demand expansion which is achievable over a period of several years. In the 1960s and again in the late 1980s, when the industry was in the large acreage-production phase of the long-term cycle, supplies were substantially greater than sales, in part because demand growth was rather limited.

This experience indicates that in the tart cherry industry demand expansion alone is inadequate for the task of bringing about a long-term balance between supply and demand at prices which allow growers a positive return on investment. Demand expansion is nevertheless an important component of long-term coordination and an approach which has widespread support among tart cherry growers and processors.

In comparison to tart cherries, certain other perennial crop industries such as blueberries and almonds have achieved larger sustained increases in industry demand over a period of 10-20 years. Although both the blueberry and almond industries have experienced substantial increases in production, both have generally been able to expand demand by a commensurate amount. However, both industries have also faced some temporary oversupply situations. If the tart cherry industry could achieve long-term demand expansion at

levels comparable to those attained by the blueberry and almond industries, this could greatly improve cherry industry economic conditions.

Why has large, sustained demand expansion been historically possible to a greater degree in the blueberry and almond industries than in the tart cherry industry? Although this question is worthy of further comprehensive study, a partial answer includes such factors as: (a) greater stability in terms of annual supplies for these other two crops when compared to cherries, (b) greater development of export markets, especially for almonds, (c) differences in industry organizational structure, (d) strength of brand position of retail products, which is especially strong for almonds, (e) a substantial and growing fresh market for blueberries, (f) decreasing consumer preferences for sweetened desserts, and (g) the difficulty of achieving 100 percent pit removal in tart cherries. Consumer preferences for sweetened desserts such as pies have decreased in recent years, which has posed a challenge to tart cherry demand expansion, since historically a relatively high percentage of tart cherries has been marketed as sweetened desserts. In comparison, blueberry sales have relied to a lesser degree on sweetened desserts as major final products. The blueberry industry has also been able to exploit the growth trend in consumer preferences for fresh produce with expanded fresh blueberry sales, whereas tart cherries remain almost entirely a processed crop.

The tart cherry industry is interested in trying to learn from the demand expansion successes of other industries and to adapt somewhat similar strategies. To this end, some major efforts have been undertaken in the cherry industry through such organizations as the Cherry Marketing Institute.

Supply Management

Supply management programs have been discussed almost continuously within the tart cherry industry for the past 30 years. The industry implemented a supply management program under a federal marketing order during the 1970s and early 1980s. This program included reserve pool, market allocation and non-harvest diversion options as alternative provisions for managing

temporary excess supplies. Most other supply management program proposals during the cherry industry's history have included some combination of these three alternative approaches.

The fact that large crops tend to alternate with short crops suggests a profitable role for storage by individual firms. However, occasionally there is more than one large crop in succession, and the possibility of two or more successive large crops contributes to the riskiness associated with storage. Because of this risk, during most periods of the industry's history only small quantities of tart cherries have intentionally been stored by individual firms. A marketing order reserve pool program is one mechanism to organize industry-wide storage within the tart cherry industry.

Market allocation may be used to remove excess supplies in large crop years by diverting a portion of the excess from primary market uses, such as frozen cherries, to secondary market uses including cherry juice, dried cherries, and new cherry products. The effect on the primary market in a large crop year in which market allocation is implemented is similar to the market impact from a comparable quantity placed in a storage reserve pool. One difference is that with secondary market diversion, no reserve pool supplies would be available to re-enter the primary market during a later short-supply period. A market allocation approach is most appropriate when persistent oversupplies occur and there are no shortage periods for several years. A storage reserve approach is more appropriate during periods when very short crops are a frequent occurrence, which was the cherry industry pattern between 1972 and 1983.

Another alternative for reducing annual supply fluctuations is a non-harvest option. In the tart cherry industry a common occurrence in large crop years is that substantial tonnage is left unharvested even when the industry has no specific program for this. To address this problem, several supply management programs discussed and/or implemented in the tart cherry industry have included a provision to allow growers a non-harvest option in excessive supply years.

An additional approach somewhat similar to non-harvest which has been considered to some degree is a temporary "non-production" option. The idea behind this option is that it might be technically possible to develop a plant growth regulator which a grower could apply to a portion of the acreage near bloom time to prevent production that year. The result of such an approach for a perennial tree crop as cherries would be similar to a decision by growers of annual crops to reduce planted acreage for a year. Although this type of temporary "non-production" approach is technically feasible for a few perennial crops, the technology has not yet been adequately developed for tart cherries. With further research it might become technically feasible. This approach has some definite advantages over non-harvest in terms of costs and efficiencies.

Supply reduction through an orchard removal incentive program has been proposed and considered at length within the tart cherry industry, but has not been implemented. Such a program could be used to reduce some of the industry's surplus productive capacity during periods of overcapacity as occurred between 1984 and 1990. The industry has emphasized in their discussions regarding this proposed approach that any such program would not be used on a continuing basis to restrict production. Instead, it was proposed to be used only to speed the process of acreage reduction when the industry is in a period of excessive capacity from previous over-plantings.

Supply management program proposals considered and debated by the tart cherry industry during 1990 and early 1991 emphasized either market allocation or a partial orchard removal incentive program, or combinations of the two approaches. Due to the short 1991 crop there has been some resurgence of interest in use of a reserve pool for inventory management.

A Supply Management Program For the Tart Cherry Industry: The Federal Marketing Order Experience

From 1972 to 1986, a federal marketing order was operated as an important industry-wide supply management program. The marketing order program represented the culmination of

many years of development and consensus-building in a major attempt to grapple with industry supply problems. It was the result of agreement among various segments of the industry, including growers and processors, within the various states that were included in the marketing order program. The marketing order covered Michigan, New York, Wisconsin and Pennsylvania, but did not include tart cherries produced in Utah, Oregon and Washington.

Program provisions were used primarily to address the problem of annual supply fluctuations. By and large this was appropriate since during most of the period in which the marketing order was used, the main supply problem in the industry was widely fluctuating annual supplies. From the time of initial implementation of the marketing order in 1972 until 1984, the industry progressed through phases of the long-term supply cycle in which there were frequent occurrences of years with quite short supplies following years with temporary large, excessive supplies. The federal marketing order program for tart cherries had three main goals: (a) reduction in annual supply fluctuations, (b) more stable prices and (c) somewhat higher prices to growers, especially in large crop years. The primary operational provision of the marketing order during its lifetime was the storage reserve pool. The two other main provisions, market allocation and non-harvest diversion, were used in a secondary fashion.

The marketing order was implemented five times (1972, 1975, 1980, 1984, and 1985). In 1972, 1975 and 1980 there was special emphasis placed on the reserve pool as the primary option for intended use. In 1984 and 1985 somewhat more emphasis was given to secondary market allocation provisions.

In addition to the five times the marketing order program was implemented, the industry planned to use it in 1982, another large crop year. However, this planned use of the marketing order in 1982 was not permitted by a combination of OMB and USDA policies under the Reagan Administration. The disallowance of the industry plan to use the marketing order in 1982 was unfortunate for tart cherry growers, who received prices that year considerably below the costs of

even the most efficient growers. In addition, 1983 brought an extremely short crop with record high prices. Thus the very large supply fluctuations and market-price fluctuations of 1982-1983 provided an ideal set of economic conditions for the intended operations of a reserve pool.

In terms of overall program evaluation, many industry leaders agree that the marketing order worked reasonably well for reducing supply fluctuations with emphasis on the reserve pool during the 1970s and early 1980s. Since this was a period of frequent short crops, a logical approach to improving market performance was a program to store excess supplies in large crop years and to release them in subsequent short crop years.

The nature of the industry's supply problems changed substantially starting in the mid-1980s. Although the most significant supply-related challenge in the 1970s and early 1980s was wide annual fluctuations, by the mid to late 1980s the chief problem had become persistent oversupplies. This was due to large new plantings by growers in response to high prices received during the late 1970s and the early 1980s. Since by the mid-1980s the industry was entering an over-capacity phase of its long-term supply cycle, some changes in the marketing order program emphasis were needed. Industry productive capacity had expanded to the point where the likelihood of very short crops was substantially reduced. If no short crops occur for several years, cherries stored in a reserve pool would need to be marketed into secondary markets rather than being subsequently released to main commercial markets to supplement short supplies, which occurred regularly during the earlier period of marketing order operation.

During use of the marketing order in 1984 and 1985, the marketing order administrative board responded to the changing supply situation by shifting the emphasis of the program to rely somewhat more on market allocation and non-harvest and to reduce emphasis on the reserve pool. Despite this shift by the board, most growers continued to choose the reserve pool option, even in 1985 when there was a second restricted percentage in succeeding years (a condition which

would be expected to cause growers to emphasize options other than the reserve pool). The reserve pools formed in both 1984 and 1985 were eventually sold to the USDA for school lunch and other government feeding programs as secondary market sales rather than being released into main commercial markets, which continued to be in surplus for several years.

The federal marketing order program might have been modified even further to adapt the program to changes in the predominant industry supply situation, which earlier was one of annual fluctuations, to the more recent situation of persistent oversupply. Had the marketing order continued to operate, the board would probably have given even greater emphasis to the market allocation and non-harvest options of the program. In addition, this type of shift in program emphasis might have been carried still further had the industry been able to implement various additional proposals which had been considered at length. Among the industry proposals considered were amendments and modifications to the marketing order program to permit (1) orchard removal diversion credit, (2) temporary non-production through bloom abortion, if technically feasible, and (3) at-plant diversion of some low quality cherries.

In 1986 the federal marketing order was discontinued following a continuance referendum. In the referendum, slightly less than half of the growers (representing, however, 55 percent of the tonnage) favored continuation.

Industry Collective Action For Supply Management: Recent Proposals

Although the federal marketing order supply management program was terminated in 1986, the tart cherry industry continued to face substantial challenges from excessive supplies throughout the late 1980s until a temporary respite which occurred because of a shorter crop in 1990 and a quite short crop in 1991. The excessive supplies during the late 1980s were especially evident with an unusually large crop in 1987, resulting in very low grower prices, which averaged well below growers' typical annual *variable* costs.

Low prices and reduced grower and processor incomes during the late 1980s spurred industry concern about the oversupply situation. As a result, industry leaders devoted considerable time to analysis and discussion of alternative supply management program proposals. These proposals, which were considered at different times during recent years, included:

- A proposed new federal marketing order program.

This proposal was similar to the previous federal marketing order, but with:

- More emphasis on market allocation provisions.
- De-emphasis on the reserve pool aspect.
- Inclusion of a diversion credit option for orchard removal to speed up the needed downward adjustment in industry acreage.
- The addition of a national industry generic demand expansion program along with the supply management provisions.
- Extension of the stock tonnage concept used by some cooperative processors to an industry-wide program involving grower delivery quotas.
- A proposed industry financed orchard removal incentive program to be accomplished through a special new industry-wide cooperative.
- A combined program proposal of (a) orchard removal incentives, (b) market allocation of excessive supplies to secondary markets and/or (c) non-harvest diversion of some excessive supplies.

This program was proposed to be accomplished through combination of a special industry-wide cooperative and a state marketing order program in Michigan. Another new ancillary cooperative was also proposed by processors to facilitate the processing and marketing of secondary market cherries that

would have been encouraged or required by the proposed supply management program.

- A program similar to the previous one, including market allocation and non-harvest diversion, but without the orchard removal incentive program.

This list shows that the industry discussed and analyzed a number of different supply management options. These discussions spanned several years, beginning shortly after the marketing order was terminated. Each of these five proposals will next be considered in more detail.

A Proposed New Federal Marketing Order Emphasizing Market Allocation

After the cherry marketing order was discontinued, a new federal marketing order emphasizing market allocation provisions was proposed by some industry leaders. Its primary purpose was to handle the persistent oversupply situation, but also to have substantial flexibility to adjust to some fluctuations in annual supplies. A federal marketing order was proposed as the organizational vehicle, in part because a number of industry leaders were supportive of the previous marketing order's overall performance and potential. In addition, the use of a federal mandatory program to minimize the free-rider problem was highly valued by many industry leaders.

Some in the industry advocated the inclusion of a reserve pool provision in a standby mode to be used when the industry returned to a phase of the long-term cycle when short crops were again likely. Other industry participants opposed the inclusion of a reserve pool, in part because the persistent oversupply conditions at that time were not conducive to its use for annual supply stabilization.

Adequate industry support was not attained for this proposed federal marketing order with its emphasis on market allocation provisions. In addition, the USDA was reluctant to proceed with hearings without very strong evidence of widespread industry support for the proposal. The length of time necessary to follow all of the procedures to implement a new federal marketing order

(estimated at 18 months to two years) was also a significant obstacle. Another key element was the underlying philosophical preference by many in the industry for developing and implementing their own industry program without government involvement. For these reasons industry leaders decided not to proceed with a proposed new federal marketing order but instead opted to emphasize somewhat different approaches for industry supply management.

Use of Grower Stock Tonnage Contracts In an Industry-wide Program

Stock tonnage contracts between cooperatives and grower members have been used for a number of years by some cherry industry cooperatives and cooperative-corporation joint ventures. Many in the industry view use of these contracts as a workable and logical program to help balance grower members' planted acreage and production with the market demand for the processors' products.

There has been interest among some industry leaders in exploring the possible extension of the stock tonnage concept as a supply management approach to broader usage throughout the industry. Industry study committees did some analysis and discussion of this possibility, but they were not successful in developing an industry-wide program considered sufficiently fair to all tart cherry growers. In particular, there was considerable concern that the implementation of a stock tonnage program based on historical delivery levels would be quite detrimental and unfair to the substantial number of growers at that time who had a high percentage of young trees with expectations of much greater future production. Because there was the perception that an industry-wide program based on the stock tonnage concept would meet with strong opposition from significant industry segments, this idea was not pursued further.

A Proposed Orchard Removal Incentive Program With the Use of a New Cooperative

In the late 1980s there were several large to medium-sized crops, which resulted in persistent surpluses and low prices. Economic conditions

were very difficult for growers, but to some extent for processors too. When estimated industry production capacity was compared to likely levels of demand, it appeared that there was substantial excessive capacity in the industry, especially in large crop years. A number of industry leaders became quite concerned about the need to bring supply and demand into closer balance. A program was therefore proposed that would use funds from voluntary grower assessments to pay growers who might choose to remove some orchards. The purpose was to speed up the reduction in acreage and industry productive capacity which would otherwise occur only slowly.

An important goal of the orchard removal incentive program was somewhat higher grower prices which would at least cover annual variable costs and be closer to breakeven prices for typical growers than had been the case in recent years. Even with the program, however, the intended prices would probably still have been below the breakeven level for many growers.

The plan involved accepting the lowest grower bids until the target level of orchard removal was achieved. Target levels would be estimated to bring potential supply closer to expected levels of demand, after accounting for likely growth in demand. Growers could choose to bid the amount of money that they would accept to remove certain orchard blocks or their entire tart cherry acreage.

To implement the "cherry orchard buyout" program, a special industry-wide supply management co-operative was formed called United Cherry Producers. It had grower membership in almost all cherry-producing states with especially strong support from Michigan, Utah and Wisconsin. The new cooperative and the orchard buyout proposal also had strong support from many processors in the industry.

Industry leaders who proposed the "orchard buyout" program through the United Cherry Producers cooperative imposed upon themselves the restriction that the program would not be implemented unless growers representing 90 percent of U.S. tart cherry tonnage signed up as members with the cooperative and hence agreed to

pay the assessment. This self-imposed threshold was based on their judgment regarding the extent of free riders they were willing to accept in financing the program.

Within two months membership signup in the United Cherry Producers cooperative represented 73 percent of U.S. tart cherry tonnage, and over 83 percent of Michigan tonnage. However, since the 90 percent threshold was not reached in time to implement the program for the 1990 growing season, the orchard removal incentive program was not implemented, and in late spring 1990 the proposal was put on hold for the time being.

A Combined Program of Orchard Removal and Annual Supply Management

During the summer and fall of 1990, there was some re-evaluation within the industry which resulted in some changes in the proposed supply management program. Although the orchard removal incentive program had received widespread industry support, as demonstrated by the high percentage of grower signup in the new cooperative, some industry leaders believed that additional attention should be given to annual supply fluctuations. Therefore the next step was a proposal to combine the orchard removal incentive program (to reduce excessive acreage by a moderate amount) with additional provisions for managing temporary excess supplies in large crop years. These provisions included market allocation and non-harvest diversion.

Annual supply management provisions were given added emphasis because it was recognized that annual supply fluctuations would again become relatively more important (as was the case during the 1970s and early 1980s) if industry productive capacity was reduced through an orchard removal incentive program. If enough acreage were taken out to bring supply and demand into approximate balance in average years or large-crop years, they would again face the prospect of demand-hampering shortages in small-crop years. Also, even though the orchard removal part of the program would result in less industry acreage, there could still be surpluses in large-crop years due to continuing annual production fluctuations. Periodic surpluses would be

especially likely if orchard removal was implemented only to a limited degree, which was the intention of the proponents. In this case, the likelihood of annual shortages would be minimized as compared to a situation where large acreage removal was undertaken.

At the time that this proposal was being considered, there was little widespread industry enthusiasm for a storage reserve provision, even though the implementation of an orchard removal program would likely have resulted in renewed relevance of a storage reserve to avoid temporary shortages. The lack of industry enthusiasm for a storage reserve at this time was due largely to the persistent oversupplies from industry overcapacity during the years immediately preceding (1984-1989). Many in the industry believed that it would be more desirable to emphasize provisions that removed product from the primary market altogether (market allocation and non-harvest) than to emphasize provisions related to a storage reserve and subsequent release of supplies if shortages occurred. Consequently, a storage reserve pool was not a major provision for the program proposal that was pushed in late 1990.

In terms of the organizational structure to implement this combined program, the proposal called for use of a mandatory state marketing order program in Michigan, combined with the special supply management cooperative, United Cherry Producers, in all cherry-producing states. The United Cherry Producers cooperative membership provided a substantial base upon which to build support for the combined program proposal. In addition, approval by referendum of the proposed state marketing order would have assured mandatory participation in Michigan.

Since United Cherry Producers had a high membership signup in Utah and Wisconsin, even with a relatively low signup among growers in New York and Oregon, the program might have readily achieved participation rates as high as 85-90 percent overall if the mandatory program had been approved in Michigan. On the other hand, there were indications that at least some non-Michigan growers would have rescinded their cooperative membership, because they did not support the proposed annual supply management

provisions. They had signed up originally because of their willingness to participate in the financing of the orchard removal incentive program. Nevertheless, since Michigan produces 72-75 percent of all U.S. tart cherries, the mandatory feature of the state marketing order would have helped to minimize the overall free rider problems--especially in comparison to the alternative of a cooperative attempting to operate such a program on its own.

Some Michigan growers were concerned because the proposed program would be mandatory in Michigan but not in the other states. Some believed that it was unfair for Michigan growers to bear a disproportionate burden.

A hearing was held on the use of a state marketing order in Michigan, but a referendum on the proposed mandatory program was not conducted. Obstacles to the proposed program included certain legal interpretations as well as less than full agreement within the industry regarding the desirability of the program.

An Annual Supply Management Program

After another period of re-assessment during the winter-spring months of 1991, the industry considered yet another modified proposal. A moderately short crop in 1990 contributed to a reduction in concern over the industry's over-capacity problem and to some erosion of support for an orchard removal program. Some of the focus of the supply management proposal shifted back to annual supply variability. This program proposal therefore emphasized market allocation and non-harvest diversion provisions, while the orchard removal incentive program was dropped. The proposed organizational arrangement was again to be a combination of the supply management cooperative with membership in all tart cherry producing states and mandatory grower participation in Michigan through a state marketing order program.

New hearings on the revised program proposal for annual supply management were held in April 1991. An industry referendum was not conducted on this state marketing order proposal.

Since that time, the level of tart cherry industry activity in the area of supply management has abated considerably. The reduced interest in supply management has been partly due to the fact that the 1991 crop was quite short because of spring freezes, resulting in high cherry prices, at least temporarily.

A Preliminary Proposal For a New Storage Reserve Program

Since the 1991 crop was quite short, there is now renewed interest among some industry leaders in some type of broad based industry storage program. This approach could help avoid excessive supplies in the large-crop years and shortages in the small-crop years, much like the previous federal marketing order program. Because this latest proposal is in a preliminary discussion stage, final decisions have not been made regarding the organizational vehicle to use with this latest proposal. Some consideration is being given to the possibility of using some form of voluntary processor participation in a storage reserve or market allocation program. How these ideas may or may not develop into a major program proposal for the industry remains to be seen.

Some Challenges for The Industry Supply Management Proposals

Any industry-wide supply management proposals can expect to face a number of special challenges. Since they are less common than demand expansion programs, supply management programs are more likely to meet with skepticism or overt opposition regarding both their desirability and workability. Some challenges facing supply management proposals examined in this research report include:

- Difficulty in developing an adequate consensus within the industry regarding:

- The seriousness of the problems.

(Were the problems sufficiently serious to warrant the implementation of an industry-wide supply management program?)

- The nature of the problem.

(Was the main problem one of excessive productive capacity, or annual supply fluctuations, or both?)

- Which type of program and which main provisions would be most effective in solving (or improving) the problem?
- The workability of a program.

(Would a supply management program work sufficiently well to be worth doing?)

- Strong philosophic opposition by some in the industry to supply management programs in general, and to any mandatory programs in particular.
- Difficulty in attaining an adequate level of industry support to:
 - Have an effective, workable program.
 - Avoid or minimize the "free rider" problem.
- Difficulty in developing a comprehensive program that would solve or reduce the current supply problems, yet be sufficiently flexible to deal effectively with changing future conditions.

Developing a substantial industry consensus in favor of an industry-wide supply management program is important but difficult to achieve. Because of consensus-building difficulties, many industry-wide program proposals include only those provisions likely to be acceptable to a substantial percentage of the industry. Program design and development as well as industry consensus-building strategies are influenced by these considerations. Most of the industry program proposals discussed in this paper contained only the minimum action provisions that would receive adequate support and yet help to reduce some of the major industry problems.

Implications for Other Commodity Industries

Tart cherry industry experiences in dealing with various supply management program propos-

als provide interesting examples of commodity industry leaders facing serious economic adversity and working together to propose industry-wide solutions. Although none of the recent proposals have yet been implemented, much energy and creativity went into analyzing, discussing and developing them. A number of program ideas that were analyzed will likely receive further consideration by the industry in the future.

The special supply management cooperative, which was intended to function with several of the proposals either by itself or in conjunction with a state marketing order program, was an unusual and innovative organizational alternative for accomplishing supply management functions. Formation of a cooperative for the purpose of undertaking industry supply management functions is a concept that may warrant consideration from other commodity industries that face similar problems of periodic supply-demand imbalance. If a high degree of industry agreement can be reached, a cooperative may be a less cumbersome form of industry-wide collective action for supply management than a method such as a marketing order which requires government action. On the other hand, free rider problems can be reduced if such a supply management cooperative were to operate in conjunction with a state or federal marketing order that can employ mandatory features to increase industry participation.

The tart cherry industry program proposals were aimed at supply problems that occur periodically in a number of perennial crop industries-- (a) surplus industry productive capacity from overplanted acreage, and (b) large annual fluctuations in production. Although these two types of supply problems have been especially pronounced in the tart cherry industry, they also affect most tree fruit and perennial crop industries to some degree. A number of perennial crop industries, including almonds, raisins, hazelnuts, prunes and walnuts, have developed industry-wide supply management programs that are somewhat similar to those of the tart cherry industry. Industry collective action of this nature for the purpose of improving commodity industry performance may also be beneficial for certain other perennial crop industries. Comparisons to the tart cherry industry experience may be interesting and useful to

other industries that face somewhat similar problems.

References

Ricks, Donald J., Larry G. Hamm, and W. Compton Chase-Lansdale, *The Tart Cherry Subsector of U.S. Agriculture: A Review of Organization and Performance*. N.C. Project 117 Monograph 12, North Central Regional Publication 278, University of Wisconsin, July 1982.

Ricks, D. J., "Marketing Coordination in the U.S. Tart Cherry Industry," *Acta Horticulturae* 203, June 1987.

Ricks, Donald, "The U.S. Tart Cherry Industry's Economic Situation: Past, Present and Future," Staff Paper 90-66, Department of Agricultural Economics, Michigan State University, East Lansing, September 1990.