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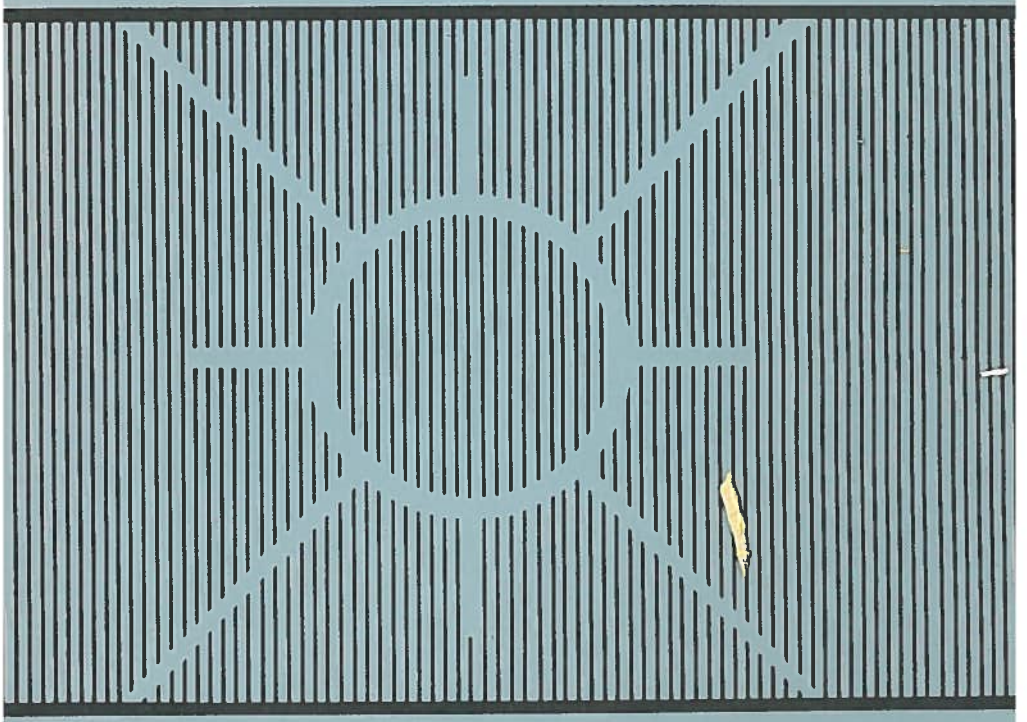
THE TART CHERRY SUBSECTOR OF U.S. AGRICULTURE: A REVIEW OF ORGANIZATION AND PERFORMANCE



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Chapter 7

THE FEDERAL MARKETING ORDER STORAGE PROGRAM FOR TART CHERRIES IN RELATION TO INDUSTRY PERFORMANCE

In the tart cherry industry, there are a number of forces causing change in organization and performance. One force is the use of a federal marketing order to stabilize market supplies. This relatively new marketing institution is designed to reduce one of the most serious sets of performance problems for cherry marketing (see Chapter 3 for further treatment of the extent of unstable supplies and the related marketing problems). The marketing order may have an appreciable impact on the future evolution and performance of the industry.

THE MAIN OBJECTIVE—TO STABILIZE SUPPLIES

The fundamental idea of the cherry marketing order is to use a storage reserve pool to remove some cherries from the market in years of excessively large crops and then to sell these pool cherries at a later time when cherries are scarce and prices are high. Results of this program, from the grower's point of view, include higher prices in the large-crop years than without the order and more cherries to sell in short-supply, high-priced periods. Another major result, particularly from the point of view of manufacturers, retailers, and consumers, is that using the storage pool can stabilize supplies and prices from year to year. As discussed previously, greater stability is highly desirable from the point of view of consumers, food service buyers, and food manufacturers who use cherries in their final consumer products. Stability will likely benefit growers in the long-run through the encouragement of market expansion.

OPERATION AND PERFORMANCE OF THE MARKETING ORDER

The industry has used the marketing order three times. A brief review of the functioning and results of the storage pool during the first two uses in 1972-1973 and 1975-1976 will demonstrate the methods and potential of this marketing order program. Since the recently-formed storage pool from the 1980 use of the marketing order has not yet been entirely sold, evaluation of this last experience must be postponed.

The 1972-1973 Experience

The 1972 season was a year of large supplies due to a fairly large new crop and larger than usual carry-over stocks. Using the federal marketing order to reduce some of the excessive supplies on the market in 1972 resulted in a strengthening of grower price and processed cherry prices. If the marketing order had not been used, the grower price would have no doubt been lower than the 8¢ which prevailed that year. Without use of the order, industry observers estimate that growers probably would have received 6¢ per pound in 1972.

The market for frozen cherries probably was strengthened by using the order. During the year this frozen cherry market gradually moved up from 16¢ at pack time for Grade A cherries to 23-24¢ in the spring of 1973.

The impact on retail prices is not clear because of a lack of definitive data and due to pricing complexities between processors and retail consumers. Since most tart cherries are not sold at retail as cherries but rather as cherry pie, turnovers, or other prepared desserts, many other factors have equal or greater impact on the retail price than does the farm price for cherries. Retail prices will likely be affected by manufacturers' product-line pricing decisions, costs of other ingredients, and by retailers' pricing, buying, and merchandizing strategies. As a result of these complexities, a 2¢ change in cherry price at the farm level will usually be reflected quite imprecisely at retail—with perhaps little or no change shown at the retail consumer level. Thus, it is probably that the retail price effect of the 1972 marketing order was small, although likely slightly higher than would have occurred without use of the market order.

By spring of 1973, cherries were quite scarce on the market and prices were high compared with prices during a number of previous years. These within-season market conditions suggested a partial release of the market order pool would be in order. On the other hand, historical patterns of annual supply fluctuation indicated a high probability for the 1973 crop to be small. Thus, even before the 1973 freeze-danger period had arrived, maintaining a pool was in keeping with the principles of the marketing order program in view of the probability of a short crop occurring in 1973.

The Cherry Administrative Board's decision in early spring of 1973 was to release 75% of the frozen cherry pool at an average price of 21¢ per pound. Because of the market strength at that time, the pool cherries were sold without depressing market prices for frozen cherries. Without the pool release, the market price for frozen cherries would probably have risen somewhat more than actually occurred. The magnitude of this price restraining effect of the pool-release was, however, probably small. Growers netted an average of 10¢ per pound on their pool cherries from the spring release.

Table 6. Cherry Prices During the 1972-1973 Use of the Marketing Order

	Price of Frozen Cherries	Grower Price for Raw Cherries
Harvest Time 1972	16¢	8¢
Spring Release—March 1973	21¢	10¢
Fall Release—November 1973	42¢	29¢
Average Both Pool Releases	26¢	15¢
For Diverted Tonnage	—	0¢
Average of Pooling Growers for All Cherries Produced	—	9¢
Average of Diverting Growers for All Cherries Produced	—	7¢

Later it became evident that the 1973 tart cherry crop was in fact very short (one of the shortest crops in recent history). The smallness of the crop, plus limited processor-owned carryover stocks of cherries, short supplies of competing fruits, a strong export market, and other strong demand factors led to 1973 cherry prices which were very high for those times. With the very short supplies and high prices, it was quite desirable for the cherry industry as well as for the buying trade, and indirectly for consumers, to have had some of the marketing order pool left unsold.

The remainder of the pool was released for sale in November, 1973 at an average price of 42¢ per pound of frozen cherries. This portion of the pool returned growers an average of 29¢ per pound of raw product. Although the amount remaining in the pool was quite small, it did supplement the short supplies. Clearly, however, pool performance would have been much improved had there been a substantially larger pool from the 1972 crop to supplement the short 1973 crop.

Growers who participated in the pool received an average of about 15¢ per pound for all of their pool cherries (both releases) after deducting the pool costs of processing, storage, insurance, etc. Those growers who left their 15% restricted tonnage unharvested in 1972 received *nothing* for those cherries, although they did save the costs of harvesting the restricted percentage. This comparison of net returns from storage vs. non-harvest documented the advantages to growers of the storage pool and the limited value to growers of the non-harvest provision.

As a result of the above discussed experiences, the marketing order's performance in attaining a stronger price and higher grower income was very favorable from the grower's standpoint. Total gains to cherry growers from use of the marketing order were estimated taking into account: (1) the higher price for cherries sold by growers in 1972, (2) returns from pool cherries, (3) lost sales from some tonnage "diverted" (unharvested) in 1972, (4) saved harvesting costs from this "diverted" tonnage, (5) a shorter carryover in 1973 probably due in part to using the order, and (6) costs of operating the marketing order. Analyzing these factors results in an estimated aggregate gain of $5.8 million in net income to all tart cherry growers in the nation.

From the standpoint of consumers, manufacturers, and the away-from-home-food trade, the market order did not stabilize supplies and prices as much as would have been desirable. This is also true from the growers' and processors' interests regarding long-run markets. Ex-post analysis indicates that the market order's performance would have been improved with: (1) a larger 1972 pool, (2) less non-harvest diversion (subject to processing plant capacity limitation[7]) and (3) less of the pool sold in the spring of 1973. However, such ex-post analysis is much easier than the ex-ante decision-making framework of the industry participants with its many risks and uncertainties. Furthermore, it was the very first time that the market order storage program was implemented, a fact which added to the uncertainties and, hence, to the cautiousness of the participants.

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[7]The USDA's Crop Reporting Service has estimated that 43 million pounds were unharvested in 1972 of which 22 million pounds were left because of the marketing order diversion. Because of limited processing capacity, industry observers estimate that probably 30-33 million pounds would have been left unharvested even without the marketing order.

The basic premise of the marketing order storage program was supported by the 1972-1973 experience. Although the magnitude of the effect was less than ideal, the stabilizing principle of the storage pool was demonstrated to be a workable means to improve industry performance.

The 1974 Experience

The 1974 crop was moderately large, but the market appeared strong. Hence the marketing order was not implemented.

The marketing order program was designed with the intent that it would not be used in certain years like 1974. Information available to the marketing order board in June 1974 strongly indicated that it would be sound not to use the marketing order that year. Later during the marketing year for processed cherries from the 1974 crop, cherry markets weakened considerably in both price and volume sold. This occurred because of an unusual combination of market-weakening factors. Because of this price-weakening situation which provided large risks and low net returns to processors and to cooperative growers, some of the industry felt that the marketing order should have been used to create a storage pool in 1974. Such a marketing order pool, had it been created, would have needed to have been carried two years until 1976, since 1975 was also a large-crop year in which a market order storage pool was formed.

Since 1976 proved to be an unusually short crop year, ex-post analysis shows that formation of a pool in 1974 to carry until 1976 would have provided positive benefits to the cherry industry. Such action would have helped attain the market stabilization goals of the marketing order and improved cherry marketing performance. Again, however, such ex-post analysis is relatively simple, whereas the ex-ante decision-making framework facing the Cherry Administrative Board in June 1974 was fraught with much more uncertainty and difficulty. At that time, the probabilities that future crop patterns and market behavior would mesh for a successful pool were relatively low. Hence, the decision not to have a pool in 1974 was sound based upon the information and probabilities regarding future events available at that time.

The 1975-1976 Experience

In 1975, the cherry crop was forecast to be very large and the marketing order was used. The crop turned out to be substantially smaller than estimated in June of that year and therefore 23% of the pool was sold into normal market channels a few months after harvest in the fall of 1975. This portion of the pool was sold for an average of 25¢ per pound of frozen cherries.

By early spring 1976, markets had strengthened. There were widespread indications that some additional supplies could be sold at moderately stronger prices than earlier (in a price range of 28-29¢ per pound). On the other hand, the freeze-danger period for 1976 had not yet occurred. Historic crop production patterns indicated a high probability for a short crop in 1976, following a large crop in 1975 and a moderately large crop in 1974. Taking into account this probability for the production pattern and the marketing order's overall goal to stabilize supplies and prices, these factors would together argue for selling a small percentage

of the remaining pool in early April 1976 and holding the rest to supplement the 1976 crop which was likely to be short. There were, however, risks associated with that type of action since it would be possible for 1976 to bring a substantial crop, even though historic production patterns would give this a low probability of occurring.

The Cherry Administrative Board's decision was pressured by the fact that many growers needed to sell some pool cherries at that time to meet unusually difficult cash-flow commitments. Cash flow was a particularly serious problem for growers at that time because they had obtained very low prices from the portion of the 1975 crop which did not go into the storage pool.

Because of above the above factors, the Cherry Administrative Board dediced to release the entire unsold pool in April 1976. This spring release (77% of the original pool) was sold at an average price of 28.5¢ per pound. After deducting pool costs for processing and storage, the growers received an average return of 11¢ per pound. This can be compared to an average grower return of 9¢ per pound from that same crop in summer 1975. Thus, it was reasoned that: (1) growers would be pleased with the higher level of short-term pool returns compared with 1975's cherry prices, (2) the market would have more needed cherries available, and (3) the pool would already be sold if 1976 later proved to be a year with a substantial crop.

Since 1976 turned out to be a year with: (a) a very short crop, (b) record high cherry prices, and (c) insufficient supplies to maintain certain long-run cherry markets, ex-post analysis clearly indicates that most of the 1975 pool should not have been sold in spring 1976. Again, an ex-post analysis is relatively simple. Nevertheless, the ex-ante situation (April 1976) involved a high probability of 1976 being a short-crop, high-priced year and the principle of the order is to stabilize supplies by pooling from large-crop years to short-crop years. These factors provided strong reasons for maintaining a substantial portion of the pool unsold until after the freeze-danger period.

Table 7. Cherry Prices During the 1975-1976 Use of the Marketing Order

	Price of Frozen Cherries	Grower Price for Raw Cherries
Harvest Time 1975	25¢	9¢
Fall Release—November 1975	25¢	9.5¢
Spring Release—April 1976	28.5¢	11¢
For Diverted Tonnage	—	0¢
Average of Pooling Growers for All Cherries Produced	—	9.2¢
Average of Diverting Growers for All Cherries Produced	—	7.6¢

One compromise strategy might have been for the marketing order board to sell 25-50% of the remaining pool in early spring 1976 and to hold the remainder to supplement short supplies expected from the 1976 crop. Such a strategy would have substantially increased grower returns from the pool, aided in maintaining long-run cherry markets, moderated cherry ingredient costs of dessert manufacturers, and probably moderated retail prices somewhat.

SOME POSSIBLE CHANGES FOR IMPROVED PERFORMANCE

With the experience gained using the marketing order the first two times, some consideration of possible changes or amendments may be desirable. Several possibilities might help improve market order effectiveness and performance.

One amendment might be to specify that in a spring release, there would be a maximum percentage of the pool which could be released before the frost-danger period. For example, perhaps the Cherry Administrative Board should not release more than 25% (or perhaps 50%) of the pool until June 1 (or perhaps not until after the new pack). With this additional restriction, at least some of the pool would be available to supplement freeze-year short crops. If the year following pool formation were a large-crop year, the remainder of the pool would be carried for another year.

If a stipulation such as that outlined above had been a part of the marketing order in 1973 and 1976, larger amounts of pool cherries would have been carried into the short-supply, high-price seasons in both years. This requirement would have substantially improved marketing order performance. In fact, historical industry production patterns are such that the probability is high that for most occasions an order restriction of this type would improve its performance. On the other hand, in a few cases such a restriction would result in a portion of a pool being carried an additional year with some additional carrying costs.

Another amendment to the order might be to delete the non-harvest provision. One disadvantage of this change would be experienced when two large crops occur in successive years. In the second large year, if there were a large pool already in storage, the pool should probably not be increased substantially to avoid excessive long-term pools. Moreover, given a lack of processing capacity in the industry, part of a very large crop will likely be wasted even without the market order. Under these conditions, the role of a non-harvest provision would be to distribute equitably the non-harvest burden among all growers and to avoid the tendency for quite depressed prices. Since the above conditions occur quite infrequently, the non-harvest provision would seldom be used.

System performance, especially from the point of view of consumers and manufacturers, would not be favorable if the non-harvest provision becomes a major or frequently-used tool. This does not appear likely to happen based on the experience to date. As long as the non-harvest provision remains of minor importance, it probably adds flexibility, which is desirable to the growers, particularly in view of: (1) the infrequent possibility of two large crops in succession, (2) limited processing capacity, and (3) the difficulties for some growers to finance pool costs.

In the first marketing order implementation (1972-1973), the storage pool was not sufficiently large to stabilize prices to the extent most desired. The small pool can partly be attributed to only about 50% grower tonnage participation, which was understandable given the newness of the program in 1972. Partly because of the earlier experience in 1972-1973, in the 1975 use of the marketing order about 80% of the growers' restricted tonnage was placed into the pool. In the 1980 use of the marketing order, growers put 99% of the restricted tonnage into the pool. This increased percentage participation in the storage pool was influenced in part by information provided by extension economists [13]. In regard to pool participation, marketing order performance is improving. If pool participation continues to approximate 99% of restricted tonnage, potentially undesirable performance from the non-harvest provision will not be realized.

An important change that might contribute significantly to even greater storage pool program strength would be increased incentives for pool participation. One current disincentive to participation for some growers is that they bear all of the risks and pool financing costs. Some growers complain that financing costs are especially difficult for certain individuals. These financial and risk burdens could be spread by processor participation in storage pool costs, equity, and gains. Processors could perhaps own half the pool and finance half the costs of the pool cherries. Such a sharing of responsibility would merge the interests of these two segments of the industry while encouraging pool participation.

Another change which would increase participation in the marketing order pool would be to include Utah which is presently not included due to historic minor production there. As outlined in Chapter 1, Utah is currently expanding tart cherry production significantly. Including Utah on a common basis in the marketing order would probably strengthen this industry program.

Another possible amendment to the federal marketing order would be to integrate the supply-stabilizing program with the cherry industry market expansion and promotion program. There have been separate organizations for the federal marketing order and for cherry promotional efforts in several states (supported by state marketing orders). Promotional activities might be on a more sound financial basis through merger of the two types of industry programs—supply-price stabilization and promotion or demand expansion. Coordination between the two kinds of programs, which have certain common goals, might also be facilitated. Overall costs for staff and management would probably be reduced by such change, especially since the federal marketing order will not be used every year. This amendment could assist the tart cherry industry promotion program which is important to the vitality of cherries' competitive position as a minor commodity in the modern U.S. food marketing system.

Although the marketing order would permit the use of a cherry juice set-aside pool, juice has not been pooled to date. Perhaps future conditions may warrant use of this provision to stabilize juice supplies and to stimulate market availability and expansion.

OVERALL EVALUATION

Experience with the cherry marketing order indicates it is an industry program based on sound principles to improve the industry's performance relative to one of its most important problem sets, i.e., that of widely fluctuating supplies and prices. Effective use of the marketing order to attain these goals in the most efficient manner is a difficult task. There are many pressures to take relatively small, but more certain, short-run gains at the expense of more substantial but long-run gains in solving the basic problem. This is mainly because the more substantial gains involve more risks. As more experience is gained in the use of this joing industry marketing tool, greater effectiveness will likely result. Another possibility, however, is that the marketing order storage program may be used so that it will have only minor impact on industry performance.

The cherry marketing order storage program appears to be an example of a marketing order in which the long-run goals for growers and processors are consistent with performance goals for consumers, retailers, and food manufacturers. Therefore, this marketing institution has a substantial potential for improving performance of the total cherry marketing system and for each major participant group.