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WITHDRAWN

ECONOMIC PERSPECTIVES FOR NORTHWESTERN
MICHIGAN CHERRY GROWERS

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Economic Perspectives for Northwestern Michigan Cherry Growers

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Northwestern Michigan has long been predominant in the U.S. tart cherry industry. Michigan growers produce 72% of the nation's cherry crop while New York, the No. 2 state, contributed 9% of the nation's total. Within Michigan the northwest region centered around Traverse City, produces an average of 53% of Michigan's crop.

There are a number of important reasons why northwestern Michigan has been, and will likely continue to be, a dominate region for the nation's tart cherry production. Tart cherries are very susceptible to damage from spring freezes. The most economical means to guard against this risk is to plant cherry orchards on sites which have a low probability of spring frost damage. This kind of site is found in northwestern Michigan with its high hills near large bodies of water, such as Grand Traverse Bay and Lake Michigan. Few other regions of the United States have as desirable sites for cherries as does the Traverse City area. Desirable soil types for raising cherry orchards are also found in northwestern Michigan. For these reasons the production potential of northwestern Michigan has been higher and more consistent than any other cherry producing region of the United States.

It has long been demonstrated that the most important economic factor contributing to a positive return on investment in cherry orchards is to have consistently high yields per acre. The most important way to assure high yields is a superior site which minimizes freeze damage. High yields are particularly likely to be profitable if a grower has high yields in those years when the rest of the industry experiences substantial freeze damage, hence

there is a short industry supply resulting in high prices. A grower who has a large crop on his farm in a short-crop, high-price year, can make very substantial net returns on investment. On the other hand, cherry growers who try to grow cherry orchards on frost susceptible sites will tend to have good yields only in years of favorable weather, with little or no production in years of frosts which tend to occur in the industry on an average of one in every two or three years. Growers on the poorer or marginal sites tend to have very low or negative returns on investment over a period of 10-20 years.

The three largest risks to profitability in the cherry business are (1) Loss of the crop by the grower in the short-crop, high-priced year due to the effects of spring freezes (as discussed above); (2) Loss of crop in the large-crop year because of a lack of a processor home or limited processing capacity so that some of the crop cannot be harvested and marketed through a processor; and (3) Low prices in the large crop year. For the first risk, the clearly demonstrated best strategy is a superior orchard site for consistently high yield such as discussed above. For the second risk, one effective strategy in recent years has been for the grower to build his own relatively small, well-managed processing plant to assure that he can process all of his cherries when they need to be processed and to integrate this with the farm's mechanical harvesting operation.

One of the most effective strategies for dealing with the low price risk by the individual grower has been to tie in with a federated commodity marketing organization and/or to vertically integrate with a strong brand marketing company such as a pie filling manufacturer. While this strategy will not completely solve the low price problem in the large crop years, it has been in recent years a strong strategy that tends to reduce certain kinds of grower risk.

A grower operation which has included all of the three major strategies mentioned above seems to have incorporated some of the successful alternatives in planning and organizing for these major risks which are key factors affecting the profitability of the cherry business. Any particular marketing strategy by an individual grower will, of course, have potential disadvantages as well as advantages.

The factor of processing plant ownership or linkage to a proprietary processor has become increasingly important during the 1970s and 1980s. Because of the very short harvesting season and extreme perishability of tart cherries, a successful grower must be effectively linked through ownership, contract or agreement to a processing plant so his cherries can be processed when they need to be harvested. The importance of this factor has been accentuated by mechanical harvesting since processing plants can easily become overloaded in a large-crop year. When this happens, the grower who does not have effective linkage to a processing plant can have his deliveries cut off or be told by the plant to limit deliveries to a small amount per day. If this continues very long his cherries will deteriorate and large crop losses can be suffered. Also, the grower who is not effectively linked to a processing plant in some way, may find in years of large crops that he cannot find a home at all for a substantial percentage of his crop.

To guard against these risks, increasingly a number of large, progressive and successful growers have built their own small cherry processing plants or become members of a processing cooperative. Other successful growers have strengthened their agreements or relationships with proprietary processors. Ownership by a grower of his own plant can assure that he will get his cherries harvested and processed during the limited amount of time that is possible to

harvest and process this crop which is highly susceptible to weather damage at harvest time from wind storms and deterioration due to over-ripeness.

Thus, ownership or linkage to a processing plant has been an increasingly important ingredient for success in the tart cherry business during the 1970s and 1980s. This will likely continue to be an important factor in the future.

Although the low-price risk cannot be completely solved by the individual grower, nor can federated sales agencies, the cherry industry has developed and implemented industrywide programs to expand cherry demand through promotion, to stabilize supplies through a storage program, and to influence cherry prices through a bargaining-marketing cooperative association. The industry demand expansion program through cherry promotional efforts can help build markets for all cherries which will help individual growers as well as the entire industry. The storage program, which is done through a federal marketing order, is designed to provide more cherries for the growers to sell in short-crop years as well as to stabilize prices and aid in long-run demand growth. These programs help build the potential for long-run industry growth and more stable positive returns on investment.

Another key ingredient to strong economic returns to the cherry business is strong marketing of the processed cherries. In recent years strategies to provide the strongest possible market for processed cherries include federated sales agencies for the frozen cherry commodity and vertical integration with food companies which have strong brands. Some of the successful examples of this approach have involved co-operatives and some have involved proprietary food firms. It is likely in the future that membership or linkage with an organization of this type will continue to be a key ingredient for profitability in the cherry business.

Economies of size in growing and processing of cherries are an important consideration. Economies of size arise primarily from (1) mechanical harvesting

equipment; (2) complex management knowledge and skill for the modern technology of cherry growing and processing; and (3) efficient volume for economical operation of an on-farm processing plant.

The management aspect is related to the complex knowledge needed for insect and disease control, planting systems, fertilization, irrigation, weed control, tree training, labor management, machinery operations, and other farm operations with modern technology. Skills for achieving timely operations with varying weather conditions are also important, as are effective long-range planning and investment decision-making ability. Once a farm manager has developed these management attributes to a substantial degree, these can be spread over 200-300 acres more advantageously than with, say, 40 acres.

Most of the economies of size associated with growing and harvesting can be obtained by a cherry grower who has at least 120-150 acres of tart cherries which are on good sites so that high and dependable production per acre are obtained. A somewhat larger production volume would capture most of the economies of size for an on-farm cherry processing plant. Most diversified fruit farms with several tree crops achieve most of the farm economies of size with 200-300 acres of orchard crops. Although farms that are larger than this may achieve somewhat greater economies of size, the gains from larger size do not appear to be very great from an additional size of operation.

Another key factor for profitability in the orchard business is effective long-range planning and management strategies. Because cherries and other orchard crops involve 20-30 years between planting and the end of their productive life, the profitable grower-manager must make sound long-range planning decisions. These include site selection, orchard planting decisions, crop combinations and other long-term investments such as for processing plant facilities. The long-run nature of the orchard business means that farsighted

planning is much more important for this business than for farmers with annual crops such as corn. The manager who does an effective analytical job of planning for the long-run future is much more likely to have a profitable orchard business than one who concentrates on only this year's operations or who bases his decisions primarily on conditions in the recent past.

Considering national supplies and prices, cherries tend to have long-term cycles which cover 2-3 decades. That is, high cherry prices in the late 1940s and early 1950s caused growers to increase plantings of tart cherries considerably, which resulted in excessively large production of cherries in the early to mid-1960s with disastrously low grower prices. In response to the low prices, growers ceased new plantings and took out orchards during the late 1960s and early 1970s. The industry thus experienced a long-term downward trend in average production through the late 1970s. During the late 1970s several years of short supplies and unusually high prices caused widespread new plantings of tart cherries throughout the U.S. cherry industry. These many new plantings are now coming into bearing, causing a new growth phase of the long-term cycle.

Current information strongly indicates that the 1980s will be a period of rising average production as the widespread plantings of the late 1970s and the early 1980s mature and expand their yield potential. Thus, during the 1980s there will likely be some years of large production and downward pressure on prices as occurred in 1982. This will cause many growers, particularly those in marginal situations to stop planting tart cherries and to remove or abandon some of their orchards. The well financed, well managed growers with superior sites and effective integration into processing and marketing will, however, be the ones most likely to survive.

The increasing production expected in the 1980s and the lower prices will provide incentives for expanded overall demand for the cherry industry. Both the expanding demand and marginal orchard removals will help in establishing a more favorable supply and demand balance perhaps by the latter part of the 1980s or early 1990s. When this occurs the improved national supply and demand balance will be more favorable for substantial profits in the cherry business. Then the effectively organized and managed cherry operations will probably have a more profitable situation than is likely during the next several years.

Even though the 1980s will be a period of generally rising industry production because of expanding cherry acreage, there will be some short-crop, high-priced years as is the case of 1983. The grower with a superior site resulting in high yields during the high price years will have some good opportunities to make substantial profits.