Strategic Planning for Agricultural Industries; A Case Study of Industry Situational Analysis of the Michigan U.S. tart cherry industry

By

Loeto Rabethu Makubate

A PLAN B PAPER

Submitted to
Michigan State University
in partial fulfilment of the requirements
for the degree of

MASTER OF SCIENCE

Department of Agricultural Economics

August 1999

Table of Contents

ACKNOWLEDGMENTS

I wish to express my sincere thanks to Dr. Donald J. Ricks for his great support and tolerance during the writing of this research paper. His tireless efforts have made this paper a reality. I would also like to express my thanks to Dr. Chris Peterson who has inspired my interest in strategic management and also for having accepted to serve as my committee member.

Special thanks are extended to Curtis Rowley who has contributed significantly with his knowledge on the tart cherry industry. I would also like to remember my parents who have endured a loss of my sight for the past two years.

Finally, to my wife, Ntukunu, son Kabelo and daughter Wantha, to whom I owe much, a heartfelt thank you for their patience of staying without me for two years to allow me to finish this study program.

Chapter 1

Introduction

Economic changes have played a leading role in the transformation of agricultural industries. The evolution of environmental issues, government regulations in agriculture have produced a lot of challenges to the economic viability of agricultural industries, that should be met through better and more sophisticated planning tools, particularly the moving away from a commodity based agriculture to a more value-added orientated agriculture. This has given rise to industry strategic planning and coordination (ISPC) approaches, as an analytical tool used to address some of this problems, hence, the purpose of this paper is to explore the use of ISPC in an agricultural industry set up.

Developed countries, particularly, the US has made progress in positioning its agricultural industry to meet this challenges through the use of ISPC. An example of this success story is the Michigan apple industry which has been using a functional ISPC process. It is therefore, interesting to use this approach to other related industries in order to solve the problem that they are facing.

1.1 Objective of the research paper

The objectives of this paper are three fold. A principal goal of this paper is to develop a case study situational analysis related to a broad industry strategic planning context for the Michigan-U.S. tart cherry industry. A second objective of the paper is to give the author experience with the strategic planning analysis and concepts as it applies to an agricultural industry situation. Most importantly this will enable the author to apply the frame work and concepts to other agricultural industries.

To accomplish the above goals, a review of concepts and framework of analysis for industry strategic planning, as presented in the literature and other related work with other agricultural industries will be included. Then a case study of a situational analysis for Michigan-U.S. tart cherry industry will be used to show applications and the use of the concepts. Since leaders of the Michigan-U.S. cherry industry are currently involved with a process of industry strategic planning which is being done in partnership with analysts from Michigan State University, this industry is appropriate to use as a case study. The tart cherry industry may be useful to illustrate the situational analysis component of the strategic planning approach that may also be useful for other industries as well.

1.2 Methodology

This research paper is organized into eight chapters. The remainder of the paper will be organized as follows. Chapter 2 will review an ISPC framework, concepts and other related work. An effort will be made to define the Michigan-U.S. tart cherry industry.

Chapter 3 will provide an over view of the Michigan -U.S. tart cherry industry. A description and the role of the cherry industry in the U.S. agriculture will be provided in this chapter.

Chapter 4 will present an analysis of the industry's strengths. Chapter 5 will also present an analysis of the industry's weaknesses as they affect the economic viability of the industry. An elaboration of the industry's opportunities will be provided in Chapter 6 which will outline the important areas which can be improved upon to increase performance and competitiveness. Chapter 7 will discuss the threats facing the industry,

which are areas which negatively affect the industry's performance.

The final chapter will sum up the paper with some concluding remarks as to what lessons the author has learned about the applicability of an ISPC approach and how the author could use such an approach in other industries apart from the Michigan-U.S. tart cherry industry.

Chapter 2

Background and over view of the conceptual framework of ISPC

Many agricultural industries are confronted with challenges that affect their economic viability and success as a result of many economic changes including changing consumer demands, government regulations, environmental concerns, intra/inter industry competition etc. To this end there is a need for analysis and visioning on needed strategies to position the respective industries in the market place. This need has prompted some scholars to write about Industry Strategic Planning and Coordination (ISPC)which can be used as the overall frame work for this kind of approach.[8]

An industry strategic planning and coordination approach can be used as an endeavor by an industry to help improve its competitive and economic viability. To achieve this, substantial analysis in a strategic planning context is needed. Then decisions need to be made on a set of needed strategies to improve the industry's performance. Such strategies are manifested in many forms. For example, an industry might improve its competitiveness through the provision of superior product quality, cost leadership, and/or improved product attributes among other things.

Industry strategic planning and coordination is especially relevant because of the changing agricultural landscape. The globalization of world economies have led to increased competition.

Increased environmental concerns as well as technological advancement also contribute to the very challenging and dynamic situations which agricultural industries must face. The industry strategic planning approach is an extension of, and has much in common with, strategic management in the context of an individual firm or organization which has long been practiced and written about by well known business school authors including Michael Porter,[11] Thompson and Strickland [19]etc. Strategic planning in an industry context is , on the other hand, substantially different in some regards to strategic management of an individual firm. One difference is that at an industry level the scope is much broader since it entails a diverse set of a number of organizations and firms that constitute an industry with all their complex inter relationships.

As industries are evolving overtime, and especially with increased globalization of markets, along with growth in terms of size, product line, diversity, geographical coverage, organizational complexity and vertical integration (as well as operating in a less stable environment), their need for some type of future orientated strategic planning is increasing. It is therefore, clear, conceptually, that strategic planning, especially on certain key issues is important to the success of modern industries.

An important question is: Can efforts expended on strategic planning of firms or industries be shown to produce improved performance? A number of studies indicate that strategic management pays. For example , some researchers such as Thune and House[21] have found in their study that firms and organizations that practice strategic management have a higher rate of success compared to those that do not.

Some success stories on ISPC are supported by the recent works by Ricks and

Woods[16] and Chris Peterson[10] as well as Conrad Lyford.[8] It is important to note that Michigan has made some strides regarding industry strategic planning and coordination, this is evident in the recently completed Michigan apple industry strategic planning and also the ongoing industry strategic planning for the Michigan-U.S. tart cherry industry.

ISPC is characterized by important concepts and definitions which form the basis of a framework of analysis and approach. For a summary of this framework the PhD dissertation of Conrad Lyford[8] can be used as a main basis. These concepts are summarized and presented in the following sections.

2.1.1 Concepts of industry strategic planning and coordination.

Defining an industry boundary requires both caution and imagination. Caution is necessary because there are no precise rules for this task and because poor definition can lead to poor planning for the industry. Imagination is necessary because of dynamic factors that affect the industry as well as changes in technology and consumer demand contribute to the difficulty in defining industry's boundary without an understanding of its structural attributes. Industry structural attributes are the characteristics that define the industry. A criteria for delineating relevant boundaries for an industry for strategic planning purposes include: (1) those segments of the industry which are closely interrelated, (2) those segments for which there is substantial mutuality in regard to economic returns, (3) those segments for which in some regards there is a shared reputation in market places.

2.1.2 Definition of the approach

An industry strategic planning and coordination approach can be referred to as a

process whereby firms and organizations within an industry strategically plan together on selected aspects or issues to improve industry performance, competitiveness , and economic viability. An example is the Michigan-U.S. tart cherry industry which has recently formed an Industry Strategy Planning Council which is composed of staff representatives from major industry organizations, along with university experts who come together periodically in a round table format to develop needed strategic directions and plan for the future success of the industry.

2.1.3 Strategic process

In studying the process of strategic management and its components, various authors have developed models representing their views of the process with emphasis on the context of a firm.. Some of this models were developed by Thompson and Strickland,[20] Glueck,[5] Steiner[18] and Chris Peterson.[10]

I will use a model developed by Chris Peterson as one of the strategic management process models in this paper's discussion. Understanding and following the logical and complete process of strategic management with appropriate modifications for an industry context can help to insure that important factors will not be overlooked in formulating and implementing strategies. This may increase the likelihood that the industry will develop and employ the best strategies that it possibly can i.e. those that result in the best possible fit in the industry's environment, its distinctive competencies, and resources as well as its values and expectations. Also following the regular sequence for the process further increases the likelihood that the industry's strategic management activities will yield maximum benefits. Chris Peterson's model of the sequence of the strategic

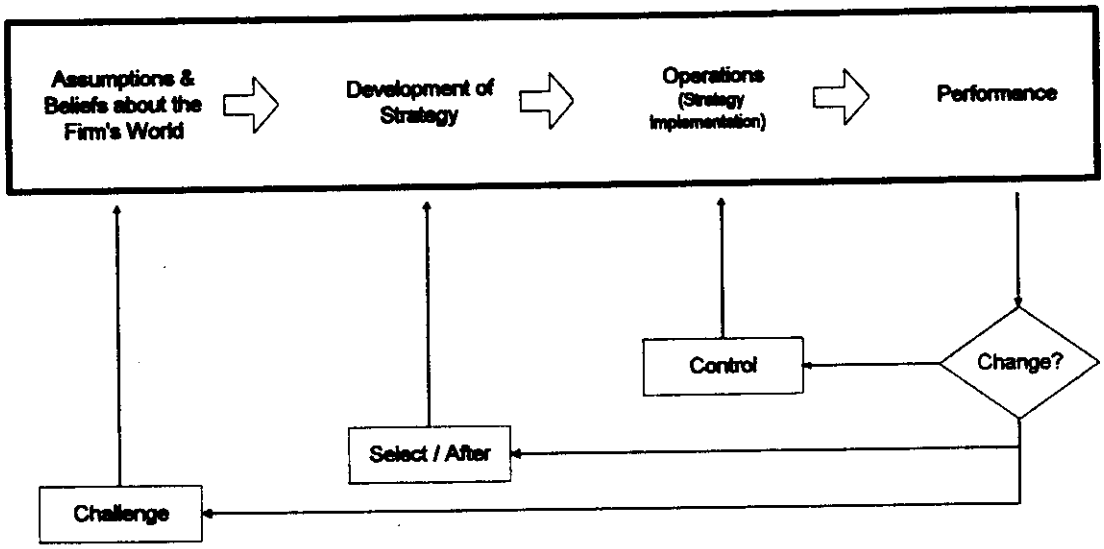
management process is shown on Figure1. This processes represent an orderly flow of activities to be taken and these are;

- Beliefs and analytical description about the world inside and outside the firm
- Strategy Development
- Strategy Implementation
- Performance Evaluation

The frame work mentioned above is aimed at improving the success and competitiveness of a firm. It can be adapted and be used as a basis for an industry context as well.

Figure 1

The Strategy Process



Source: Peterson Model as adapted from Michael Dietrich

For an industry to survive it must develop strategies that will nurture its competitive advantages. Figure 2 as adapted from Lyford is used for an industry setup. In an industry the strategic process takes the form of phases which also follow an orderly fashion as described in Figure 2. These are:

- Phase 1 Process initiation
- Phase 2 Strategic planing
- Phase 3 Implementation
- Phase 4 Strategy Re-evaluation

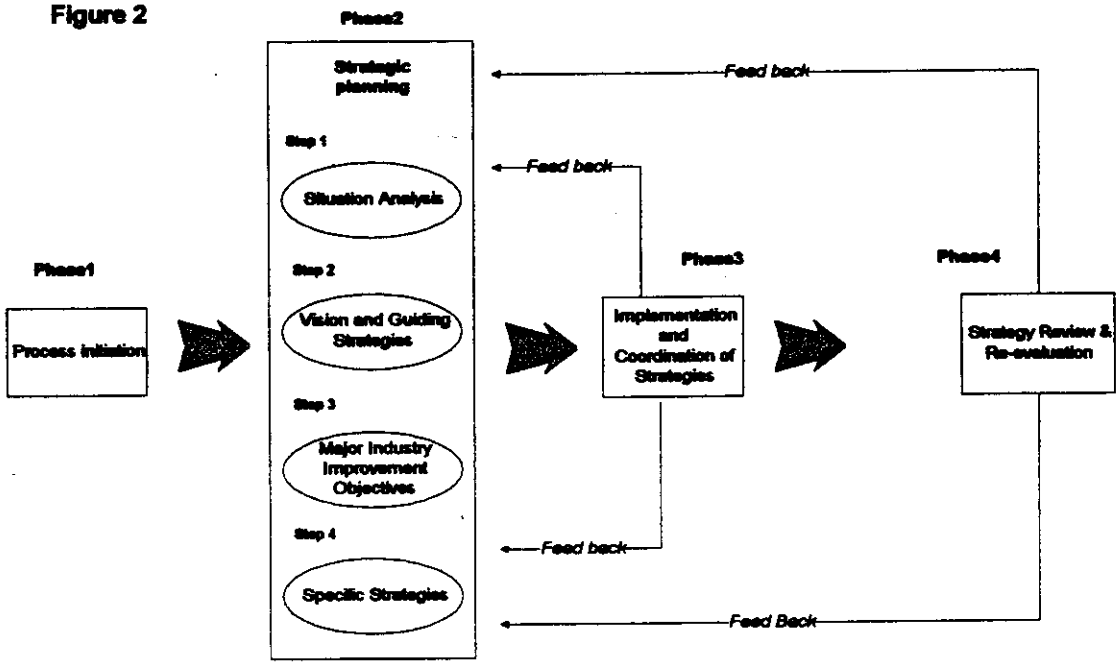
The success of an industry strategic planning process hinges on a proper analysis of the appropriate strategic issues. This can be achieved by asking the following questions;

- What are the major driving forces that are impacting the industry?
- What are the industry's core competencies?
- What are the industry's competitive advantages?
- What are the industry's main strengths and opportunities?
- How do the strengths and opportunities reinforce each other?
- What are the industry's main challenges, weaknesses and threats?
- How do weaknesses and threats reinforce each other?
- How much and what kind of changes are needed?
- What issues must be resolved for a successful future of the industry?

In practice, however many strategic plans are lists of action steps, without clear articulation of what competitive advantage the industry has or seeks to achieve and how? Such plans are likely to have overlooked the fundamental purpose of a competitive strategy in the process of going through the mechanics of planning. Therefore, a proper strategic planning process should by all means define the specific strategies to be undertaken to meet the industry's objectives. It is also important to acquire enough resources to support the implementation process.

Frame work of Industry Strategic Planning

Figure 2



Source: Conrad Lyford ISPC Model

The basic approach should be based on the strategic issues, vision/mission and long term goals of the industry. This involves defining the industry's competitive advantage, strategic initiatives, strategic scope, industry role and vertical coordination,

In reference to the discussion earlier in the paper, this paper discusses elements of strategic management and follows a process which can be broken into four distinct stages mainly; situational analysis, strategy selection, implementation and evaluation. These stages, that should be completed sequentially or sometimes simultaneous, can contribute to effective strategic planning and implementation for industries. There are specific methods associated with each step as indicated by Peterson and Lyford's frameworks in Figures 1 and 2.

The focus by industry leadership should be on clarifying and enriching an understanding of the characteristics of the industry that is being studied and the market, economic and competitive environment in which the industry operates. In order to achieve this focus it is imperative that a situational analysis should be conducted early in the process.

2.2.1 Situational Analysis

A number of methods have been used by some scholars to accomplish the situational analysis. Some of these methods include SWOT, shift share analysis, value chain analysis, competitor analysis, etc. These analyses can provide desired information to the industry strategic planning bodies or an ISPC group. However the emphasis of this paper will be on the SWOT analysis which will be discussed in detail later in the paper.

Like in a firm level strategic management approach, the logic behind the order of the steps in industry strategic planning may be described as follows. Situational analysis should be completed first because it provides the key information and knowledge on which the industry can develop a shared understanding on the industry's situation and common objectives. The situational analysis can then lead to a vision statement and guiding strategies for the industry. The vision statement and guiding strategies provide an overall strategic intent for an industry's competitive advantage and as such can guide an industry in determining and prioritizing major improvements objectives(Lyford 1998). For example in Michigan - U.S. tart cherry industry the strategic areas are; (1) demand expansion, (2) supply management ,(3) realistic pricing arrangements, (4) quality improvements, and (5) analysis of the industry's long run acreage - production cycle.
It is important at this juncture to summarize some of the key differences between the firm and industry strategy processes. Some the fundamental differences are on process initiation.

2.2.2 Process initiation

In some context to a firm set up, in an industry context the first phase of initiating the process is more complex, less predictable and more difficult. This is particularly important since the industry does not have any type of central command such as a group of executives who would normally be responsible for the management of the firm in terms of decision making. In an industry context the process is considerably more complex and hence not straightforward.

The initiation process will include identifying the potential benefits that could accrue to various stake holders in the industry. This is a way of emphasizing incentives to various segments of the industry to participate in an ISPC process.

2.2.3 Guiding strategies

Like in firm level, more specific strategies should also be developed to meet the major improvement objectives. Strategies are implemented and coordinated with different success levels. Since industries, like the firms and organization in those industries, must operate in a very dynamic environment, there is a need for an important step of re-evaluation, re-assessment of changing conditions and to reexamine the desired success based on the results and experiences of the implementors and changing conditions. Strategic re-evaluation represent an overall reconsideration of the strategies and an update on changing conditions and results. Thus it is a later step that serves as an overall feed back on the effectiveness and possible modification as would be deemed necessary.

The steps of the industry strategic planning and coordination are developed using the basic firm strategic management as the guiding model.

2.2.4 SWOT Analysis

SWOT is an acronym for the strengths and weaknesses of the industry and opportunities and threats facing the industry. SWOT analysis is a common analysis method that is a standard approach as a part of the firm strategic management. It provides an important overview of the firm's situation that can aid in the overall strategic management process. For firms, this method is described in a number of books including Pearce and Robinson.[20]

The SWOT analysis can also be adapted to an industry context. Thus it is an important component of an ISPC process. The main difference between the firm level SWOT and the comparable industry level SWOT is the level of analysis for the industry. This is broader with the industry context and in some aspects involves considerably more complexities than with a firm orientation.

This means that the appropriate scope for an industry- level SWOT analysis must encompass an inter-linked system including a wide array of firms and interrelated vertical coordinating system within the broad industry and its relevant context. In this way an industry SWOT analysis can develop a meaningful industry wide analysis. This is more complex with usually more emphasis on vertical coordination issues than firm level SWOT analysis.

A SWOT analysis can be accomplish by using a variety of information gathering techniques. These can include personal contact, interviews of key informants, surveys and joint analytical partnership relationships with the industry leaders to study the industry's environment and the economic problems and issues. For example , Ricks and Woods[16] as well as the SAMPA[17] report used a combination of surveys, interviews with key industry informants and other information gathering approaches to help develop a SWOT analysis for the Michigan apple industry along with synergistic analytical discussions with the ISPC leadership group (Woods 1996) . Lyford also suggests that the results of published data such as through a shift share and trend analysis can also be useful components of a SWOT analysis. An industry level-SWOT analysis will normally look at broad issues and coordinating system within the industry. This is usually more complex

and requires more of vertical coordination than in firm level SWOT analysis.

2.2.5 Strategy development

After overall strategic directions have been developed, more detailed planning occurs. Specific strategies, programs, priorities and appropriate schedules are developed. In this phase the objectives and goals of the industry are defined so as to facilitate the implementation process. This is a critical stage. It relies on the information that was developed in the situational analysis. This shows how important this steps should follow an orderly sequence for an effective strategic process.

Strategy development is important because it includes specific strategies that are needed to achieve the set objectives. Often a number of questions are posed at this phase in order to screen and prioritize the specific strategies to be undertaken by the industry. Some questions that are normally asked about the specific strategies are;

- Can the strategy be accomplished?
- Can the strategy bring in positive benefits?
- Will the strategy bring in significant changes to the industry?
- Does the strategy have adequate support from the stake holders?

Providing positive answers to this questions , would allow for the industry to effectively screen and prioritize its specific strategies. Hence the industry would more likely to achieve its objectives.

2.2.6 Strategy implementation

The purpose of this step is to implement the planned strategies effectively so that objectives of the strategic decisions are most likely to be realized. Implementation involves

carrying out the chosen strategy. An important step in implementing strategy is identifying the activities, decisions and relationships critical to accomplishing the strategy. Implementing strategy in an firm context is an administrative task that requires good management, because more is involved than just delegating the selected strategies to those responsible for implementation and hoping for the best.

In an industry structure, people and operating systems must be in place or developed to facilitate the implementation process. There are numerous tasks that have often been identified that need to be satisfied for a successful implementation of the strategy. Some of tasks are (1) Developing industry approaches which can facilitate the carrying out of strategies (2) Obtaining resources for facilitating the implementation of the strategic objectives (3) Developing commitment to key strategic directions and (4)good strategic leadership. It can be seen that strategy implementation is not an easy step. It is involving and requires a lot of involvement in many aspects of the industry.

It can be seen from the above mentioned aspects that they will be more readily accomplished under a firm set up. However, in the context of an industry, implementation is more complex because there is no real control in regards to management. That is an industry can not be managed as a firm can. Therefore, implementation involves more facilitation of various efforts by the industry stake holders and informational aspects than implementation through management as is a key emphasis in firm control. Therefore, the successful implementation of strategies with an industry will need to involve different tasks such as the following;

- Development of an overall industry plan of needed strategic directions for the

future

- Proper communication of the strategies to the stake holders
- Adequate resources provision for facilitation and communication roles
- Strategy encouragement

In view of the tasks mentioned above, a comment regarding a few of them as how they affect the industry is in order. For example, the provision of resources to support the ISPC process is important. The fact that there are many segments with differing objectives that constitute the industry is a key element. There is a possibility of a free rider problem. A joint means of financing an ISPC process should be found.

This also brings us to one important task mentioned above of proper communication of the strategies. If the strategy is well communicated to stake holders and they get to perceive the potential benefits, it could be expected that some voluntary action may well be undertaken

2.2.7 Performance evaluation

This step in a firm level approach is also referred to as the strategic control. It ensures that the performance of the strategies conforms to plans. As it is true of any effective performance system, strategic performance is not done after the strategic plan has been completed; instead, the results are evaluated while strategy is being followed. Effective performance involves two key areas; (1) Has the strategy been implemented as planned (or has the implementation process and detailed planning unintentionally modified the strategy that was selected)? and (2) Once implemented, is the strategy producing the desired results? Eventually this will lead to an analysis of any deviations between planned

and actual performance, and taking the appropriate corrective actions to modify the future performance.

In an industry context, the performance is measured by how much the various segments of the industry are coordinated together in order to meet the objectives of the industry.

Strategy re -evaluation recognizes that the industry must operate with dynamic environmental conditions. Hence the strategies will need to be periodically reviewed and modified. In the process the industry need to be alert to major changes that are important for the industry. It is expected that some changes that have affected the industry at the earlier phases might have changed and perhaps will be less relevant and new opportunities may arise. This is particularly important since the future can not be projected with certainty. Thus during the process more appropriate strategies and actions can be developed to meet these new challenges.

The review process could include among other things the updating of the situational analysis of the earlier phases. Depending on the nature of the industry, the frequency of the review may vary. For example with agriculture industries it may be done every year to suit the ever changing production and marketing environment (Lyford 1998). Numerous questions have been identified to assist in the re-evaluation process and these could be posed as;

- How well are current strategies working?
- What new results and obstacles have surfaced?
- What are the new challenges and opportunities?

- What are the new threats and weaknesses?

Answers to these questions are necessary in providing guidance to an effective re-evaluation of the strategies and their success levels.

2.2.8 Chapter Summary

This chapter has included the development of an ISPC approach to industry planning that is designed to be a potential use to various industries including agricultural industries. The approach draws a lot of concepts from that of a firm strategic management which forms the baseline for the ISPC approach. The ISPC framework is comprised of four important phases (1) process initiation,(2) strategic planning,(3) strategic implementation and coordination, and (4)strategy review and re-evaluation. This phases should be completed in order. The four steps in strategic planning have the goal of increasing the probability that the chosen strategies for implementation have the likelihood of improving industry performance.

Chapter 3

Introduction to Michigan -U.S. tart cherry industry

3.1 Background of the Michigan- U.S. tart cherry industry

The fruit industry is an important part of U.S. and Michigan agriculture. The state of Michigan enjoys a diverse agricultural economy. It is among the nations's leaders in a wide range of agricultural commodities. Michigan has a population base for labor and a proximity to roads, rail net work and water ways for transport. This endowment of resources assists Michigan in developing a productive and profitable agricultural industry at all levels.

There are about 40 thousand bearing acres of tart cherries in the U.S. of which 30 thousand are in Michigan with the remaining acreage shared by Utah, New York, Wisconsin, Oregon, Pennsylvania and Washington(Noncitrus Fruits and Nuts 1998). The major fruit crops grown in Michigan are apples, tart cherries, blueberries, sweet cherries, strawberries, grapes, nectarines, peaches, pears, plums, and apricots. Tart cherries are the second most important fruit after apples in the Michigan fruit industry. Michigan, however, is the largest producer of tart cherries in the nation with a national contribution of over 75% of the total output. Thus the designation Michigan-U.S. tart cherry industry is appropriate.

In addition to this high production base, Michigan also has the largest number of processors. Out of a total of the 50 processors in the industry 40 of them are located in Michigan. A high percentage of the tart cherries are grown in the western edge and northwestern part of the state. This is because the temperature-moderating effects of

Lake Michigan moderates the spring temperatures and has proved to be very suitable for the production of tart cherries.

Tart cherries are a perennial tree crop, with an average total U.S. farm value of production in recent years of 45 million dollars. Cherry production is located in a number of states including Michigan, New York, Utah, Washington, Oregon , Wisconsin and Pennsylvania. The tart cherry industry is composed of growers, processors, agri-business input- suppliers and industry organizations that work closely with growers and processors.

Commonly in the tart cherry industry, there are vertical marketing relationships developed by growers and processors to enhance the supply chain management and marketing within the industry. Such relationships are normally in the form of vertical linkages between growers and processors. This is due to the fact that all tart cherries are processed.

Tart cherries are processed into a number of products ranging from frozen, pie filling, canned , and juice. The frozen fruit category consists of individually quick frozen (IQF) and the 5+1 packs. These products are sold primarily to food re-manufacturers. Recently a new product segment has been developed to expand the cherry product lines. This is dried cherries. This product has gained popularity in the market.

Cherry growers are normally not involved in the marketing of their products to retailers since all cherries are processed and then marketed to food manufacturing, food service and grocery retail firms who in turn market the cherries to the final consumers(Hinman and Ricks1991).

In terms of coordination of processing and marketing, the tart cherry processors often establish long-term relationships with their more numerous growers. In fact, many growers are vertically integrated into processing through grower cooperatives. Further vertical stages in the production- marketing chain between processors and food manufacturers do not usually have such close long-term relationships. For example since food manufacturing and grocery customers generally deal with many food products together with tart cherries, and because tart cherries are often viewed as a minor product by these firms, therefore the cherries are usually bought with spot markets for processed tart cherries. However the overall marketing activities for manufactured products such as cherry pie, e.g. pricing, product line decisions, and advertising to the final customers, have important effects upon overall demand for tart cherries and thus have substantial indirect impacts on grower and processor returns.

One feature of Michigan-U.S. tart cherry industry is that the demand of cherries is price inelastic. That is a relatively small change in the output will lead to a greater variation in the price of the product, especially at farm level.

Since the tart cherry industry has also been plagued with surplus production capacity and overproduction for a long time, the result has been low grower returns. These were a result of the industry's long term cycle in orchard acreage and production. The surplus supply phase of the long term cycle, which has plagued the industry since the mid 1980's has led to prices that were often below the typical grower's break even levels.

A need to resolve the situation has been a major priority in the industry. This led to the development of a supply management federal marketing order program.

Chapter 4

Analysis of the cherry industry strengths

4.0 Introduction to the industry strengths

This chapter will discuss the strengths of the tart cherry industry as a part of the situational analysis for this industry. This will be done in the context of a case study of industry strategic planning process.

A key part of the SWOT analysis is to focus on the industry's strengths and weaknesses relative to other competitors industries. Strengths include the characteristics of the industry that give it important competitive capabilities. These could include such capabilities as proximity to major markets or the ability to produce a consistent top quality product. For example, the Michigan cherry industry has as one of its major strength the geographic location that makes it suitable for the production of cherries because of its proximity to Lake Michigan. This makes it more difficult for other states without the same climatic condition to compete with Michigan on a cost basis in the production of cherries because of lower average yields per acre in other states. Hence, Michigan has a competitive advantage in the production of tart cherries compared to most of the rest of in the nation. This strength can be a core competence by Michigan.

This section presents the industry strengths as part of the SWOT analysis of the Michigan-U.S. tart cherry industry. An industry strengths can be viewed as something the industry is good at doing. A strength can be a skill, expertise or competitive capability that puts the industry at a position of market advantage. Strengths may include, strong name brands, superior products, superior technologies, efficiencies resulting in a low-cost

industry etc. As a result, the industry's competitiveness is reflected by the magnitude of the strengths in relation to the other competitors – in this case competing regions or competing fruits industries. It should be noted, however, that industry capabilities are constantly changing and are influenced by many factors including economic and market conditions, institutional and technological innovations, internal as well as external to the industry, and many other factors.

Numerous strengths have been identified as of fundamental importance to the economic viability and long run success of the tart cherry industry. An attempt will be made below to discuss and elaborate on a number of strengths and their impact on the performance of the industry along with the following analytical discussion of the cherry industry strengths. A summary listing of the strengths is found in Exhibit 1.

4.1 Nature of the product

Tart cherries have a number of unique and desirable characteristics. The bright-red color and distinctive tart flavor of tart cherries makes them very attractive to consumers especially in certain kinds of cherry products.

A combination of these color and taste characteristics makes tart cherries favorable to manufacturers for use in certain types of product lines. The bright red color is a favorable characteristic for many cherry products including cherry pies, and other uses. These qualities have also been noted to provide cherries with a distinguishing feature from other fruits and competing foods. The combined presence of the bright red color, unique taste and the other superior attributes of the cherries provides some notable basic strengths for the industry to take advantage of and to build onto.

Exhibit 1

Strengths

A. Nature of the product

- Bright Red Color
- Unique Taste

B. Health Attributes

C. Product lines

- Frozen fruits
- Pie filling

D. Dried cherries

E. High managerial skills and grower knowledge

F. A Core of capable committed leaders

G. High quality cherries

H. Technological progress

I. Efficient and low cost producer of tart cherries

J. Industry support organizations

- CMI
- CIAB
- CherrCO
- MSU

4.2 Health attributes

Recently scientists have uncovered characteristics that were not well known, that is, healthful benefits that are found in the tart cherries, and are increasingly evident based upon recent research results . This research has shown that cherries contain compounds with antioxidants and anti- inflammatory properties. Antioxidants are known to prevent the oxidation of unwanted cholesterol as well as prevent cancer and heart disease. Researchers have also discovered that tart cherries are capable of relieving the pain of gout and arthritis-- perhaps better than aspirin and ibuprofen. Evidence of these properties is provided by several MSU researchers who recently presented technical results on the research information on the healthful properties of cherries .

The noteworthy human health properties are associated with the red color of the cherries. In addition, cherries are low in calories, fat, and sodium while they are high in vitamin A, potassium and other minerals. So, cherries are a natural for a healthy diet. It is interesting to note the fact that these healthful properties are also a result of the appealing red color found in tart cherries.

4.3 PRODUCT LINES

Tart cherries are marketed as part of a wide range of product lines that are sold in various markets. Some of the product lines are marketed primarily to food manufacturers as the primary customers. The tart cherry industry includes the following types of product lines:

- Frozen fruits

Pie filling

The following is a discussion of some of product lines that are of importance to the tart cherry industry.

4.3.1 Frozen Fruits

The three main frozen fruits for pies in the U.S. are tart cherries, apples, and blueberries. Michigan is the number 1 supplier for tart cherries with 80% of the nations production, with the next state Utah having around 8% of the U.S. market share . Michigan also ranks number 1 in both blueberries and frozen apples slices. The ability of Michigan to provide all these frozen fruit products in a large quantities at one place gives an industry strength. Food manufacturers find it advantageous to purchase where they can source the fruit ingredients in large quantities from one source. This is particularly important from the economies of scale and size view point.

4.3.2 Pie filling

Like in the frozen fruits, tart cherries, blueberries and apples are the major fruit items in the pie filling product lines. Michigan and the fruit industries in the nearby states such New York, and Pennsylvania have ability to provide a line of the pie fillings. Most of the pie filling manufactures have a whole line of these products of which, cherries are the largest of the pie filling product lines. This is a big strength for the industry. Most grocery stores least will carry one line of pie filling. All of the major pie filling firms, which are processing cooperatives, use Michigan as a source of tart cherries..

4.4 Dried Cherries

Dried cherries have recently developed into an increasing strength for the industry.

These are a fairly new type of cherry product category in the cherry industry. Dried cherries can provide a tasty additive to a variety of recipes. This is due to the tangy, flavorful nature of the cherries.

Dried cherries are now found in relatively small but growing, percent of grocery store shelves, but they seem to have large potential to expand in the future. This product has shown a good potential for future industry growth. Therefore, it is likely to provide an increasingly important future strength for the industry. Recent market growth have made dried cherries into an emerging strength, which is a potential opportunity for the industry. For a more detailed discussion on dried cherries see the section on opportunities at a later part of this paper.

4.5 High managerial skills and growers knowledge.

The industry includes many highly qualified personnel who are not only knowledgeable in the growing of cherries but also have had formal training in agriculture at various specialized degree levels. They have developed the needed complex set of top management skills for both growing and processing. This provides the industry with people of valuable experiences, working knowledge and managerial ability that is fundamental in the day to day running of the industry for effective performance. These industry leaders consists of growers, processors and other stake holders in the value chain of the cherry industry.

These outstanding human capital qualities can be attributable to the industry's advancement in the learning/ experience curve. The Michigan-U.S. tart cherry industry is a leader in the world in most of the growing and processing technologies that are used for

cherries. A large, continued commitment with research by the Michigan Land Grant University and development coupled with good personnel leadership provides an effective environment for this achievement.

Some members of Michigan tart cherry industry have developed new innovations that have enhanced the efficiency in the overall industry. For example one processor who has great knowledge in the industry has developed processing innovations that enhance quality and efficiency. These technologies are now sold internationally to some other countries that are involved in cherry production, particularly in eastern Europe.

This success story, however, raises some questions on the potential impact of such export of technology to competing countries. This aspect which has been a strength of the Michigan- U.S. cherry industry could help competing industries to gain a competitive advantage over the U.S. industry.

4.6 A core of capable committed industry leaders

The tart cherry industry includes a number of capable leaders who are committed to the industry and to working together to solve a number of the problems that affect the performance of their industry. For example for the past 15 years the industry has been faced with a big problem of surplus supplies which in turn have substantially reduced the grower prices to considerably less than typical costs per pound. The leaders therefore as a result of their commitment to the industry came together to work on finding solutions to this problem which could not have been solved by any individual but required collective action. This collective action gave rise to the federal marketing order program for supply management which is discussed later in the paper . A new federated cooperative, CherrCo,

was also established as a result of substantial industry leadership working together.

Industry leadership also effectively work together to expand domestic demand , facilitate new product development, expand export markets, to improve quality and to facilitate research and extension for a highly efficient industry.

4.7 High quality cherries in regard to pest control

The U.S. cherry industry has achieved for many years high quality in their cherries in regard to freedom from worms, other insects and diseases. The industry is required by law to operate with a zero tolerance as regards to any worms in the cherries. Therefore, if a manufacturer or processor detects a single worm in a consignment, they reject the whole load. The buyer may also reject the whole crop from the supplying farm with worms. This is crucial for the processor, because if they take a chance and process fruit that they later find has worms in the processed fruit, they will risk losing their market as well as their processing costs.

The industry through extensive university research has developed effective pest control techniques using pesticides that control these insects along with various IPM techniques. The Michigan- U.S. cherry industry has excellent pest control performances compared to other cherry producers around the world. This aspect is a very good strength for the Michigan/U.S. industry .

It must be pointed out that, this strength could turn into a big weakness in the future. That is , if EPA bans certain pesticides for which there is no effective alternatives, the industry may revert to a situation, as was the case back in the 1920's, when insects and diseases control was only partial.

4.8 Technological progress

A strength of increasing importance is the technological progress made by research on the development and use of Integrated Pest Management (IPM) techniques by the industry. This technological progress can help over time to provide alternatives in the event of restrictions imposed on the use of pesticides. Substantial progress on the complex IPM technologies has been made and is continuing. Also as a result of technological progress on various IPM techniques, spray application technology, etc.. less pesticides are used now than in the previous times. New pesticides which have either less residual effects or have low persistence have been developed and made available to cherry growers. The tart cherry industry has been using in recent years only an average of 4% of the maximum use permitted according to the legal label rates for commonly used pesticides.

Another strength related to technological progress is the mechanical harvesting techniques which substantially lower harvest cost compared to hand harvest. All tart cherries are now mechanically harvested. The mechanically harvested cherries are immediately cooled in water for several hours. This improves the quality of cherries, helps to counter any bruising and allows for any residual chemicals to be washed away in the cooling process . Mechanical harvesting is a very cost effective harvesting technology. This is especially the case compared to hand picked fruit. Mechanical harvesting equipment requires relatively high capital investment expenditures by growers, however, to take advantage of this technology.

Another strength on which the industry is making progress is on improving the

quality of cherries at both farm and processed level. The industry has implemented a total quality control program that includes various aspects from tree training to state-of-the- art electronic sorting quality equipment, pit detectors, superior cooling techniques and research on methods to reduce soft cherries. Thus the industry has made considerable progress on improving quality in recent years. While this is a partial strength, additional progress also is needed on quality. This is especially so for soft cherries and for achieving nearly pit-free processed cherries. This aspects will also be discussed in a later section on quality in the context of continuing challenges and weaknesses.

The industry also has a strong commitment to environmental stewardship which gives it another strength. This has been reflected in the increased use by producers of environmentally sound practices, including various IPM techniques in their farming practices as long as these provide the quality cherries which are up to the standards demanded by the market place customers.

4.9 An efficient, low cost industry as a producer of tart cherries

A primary advantage to the Michigan cherry industry is its excellent geographic location for the production of cherries in regard to climatic conditions. Michigan has an excellent climate for cherries in regard to minimizing damage from the all important spring frost. The largest acreage of orchards in the US are located in Michigan, especially in the North Western part of the state near the Traverse City area. Lake Michigan and its bays, along with high hills which provide added protection from spring frosts, provide an environment for consistent production and the achievement of high yields per acre.

The spring blossom growth is usually delayed by Lake Michigan and other large

bodies of water until the potential damages from spring frost is minimal . The presence of high hills in Michigan assist in reduction of frost damage. This ideal geographic factor is important in the reduction of production costs as a result of increased yields per acre and thus, the costs per acre are spread over larger yields.

Average yields per acre for the tart cherry growing states are presented in Table 1. Per acre yields are very important in determining production cost per pound(Kelsey et al)[7]. This is particularly true since the pre-harvest cost per acre, such as spraying, pruning, mowing etc. are nearly the same per acre regardless of the yield. In addition for growers who own their own harvesting equipment, much of the harvesting costs are also fixed per acre. It should be noted, however, that costs vary considerably by state, area and farm to farm.

The results of Table 1 show that on average yields per acre are highest in Washington and Michigan followed by Utah and New York. Thus these states are relatively low cost producers of tart cherries per pound.

Table 1 Tart Cherry acreage and per acre yields

STATE	BEARING ACREAGE	AVE. YIELD PER ACRE
	1994 -1998	1994-1998
WASHINGTON	1000	13500
MICHIGAN	29220	8236
UTAH	3280	7702
NEW YORK	3340	6178
PENNSYLVANIA	1380	5250
WISCONSIN	2740	3726
OREGON	1400	2796

Source: United States Department of Agriculture; Noncitrus fruits and Nuts 1998

Wisconsin, Pennsylvania, and Oregon on average have higher costs per pound. This is due in part to the geographic location which affects average yield per acre and perhaps to some degree because of average size of the farms. Most of these states have on average smaller size farms which do not encourage maximum economies of size such as for mechanical harvesting.

Processing costs can also be influenced by size economies of processing facilities. For example Michigan has large and highly developed facilities which tend to achieve most of the economies of size for processing. The state has about 40 processing facilities many of which process 15 to 60 million pounds of cherries annually per firm.

4.10 Ability of tart cherries to be combined with other tree fruits

Tree fruit diversification has provided some advantages to the cherry industry. The advantages for growers associated with this crop combination practice is that of being able to use the same equipment and farm labor among other things on several tree crops such as apples, sweet cherries, peaches, pears or plums as well as on tart cherries.

Since tart cherries face risks from wind whip, spring freezes and low prices, therefore, combining them with apples can in many ways be advantageous in terms of grower income stability. For example, price fluctuations for apples have been more stable than for tart cherries for the past years. Thus this practice of combining with apples or other tree crops spreads the price and weather risk as well as overhead costs for growers.

From a cost minimization point of view, the various tree fruits use much of the same equipment such as for tractors, sprayers, mowers etc. Hence capital investment can

be spread over different tree crops. In addition the harvesting seasons for apples and cherries are different and therefore there is little conflict in time for harvest management operations.

4.11 Industry support organizations and programs as strengths

The existence and recent additional progress in cooperation among a combination of strong industry support organizations is a major strength for the cherry industry. These effective industry support organizations are complementary to one another and re-enforce each other in strengthening the cherry industry. Thus they provide an important advantage in comparison to other world cherry producing regions without such organizations. Despite the fact that these support organization are mostly centered in Michigan, they form an important organizational core of the U.S. cherry industry as a whole. As mentioned earlier, the U.S. industry is largely concentrated in Michigan by virtue of its extensive cherry production. Michigan produces 75- 80% of the total US tart cherry production.

Several industry support programs and organizations provide important strengths of the industry. These include; Cherry Marketing Institute (CMI)/ Michigan Cherry Committee (MCC), Cherry Industry Advisory Board (CIAB), Michigan Food Processor Association, Michigan State University (MSU), Michigan State Horticultural Society, CherrCo and Cherry Central Co-operatives. Most of these industry organizations are multi-state or national in scope. Of particular importance is the role each organization plays in the industry. To show how these individual organizations mentioned above provide strengths to the industry, a discussion of each is summarized below.

4.11.1 Cherry Marketing Institute (CMI).

The Cherry Marketing Institute is an industry promotional organization funded by tart cherry growers in the states of Michigan, Utah, and Wisconsin. The goal of CMI is to expand the demand and increase the use of all tart cherries through promotions, market expansion and new product development. CMI promotions and other programs are aimed at consumers, supermarkets, retailers, food service operators and food manufacturers.

Regarding market expansion, CMI works to increase the market for cherries both in the U.S. and abroad. In the U.S., CMI helps food manufacturers promote cherry products through point of purchase materials, coupons, joint promotions and some forms of advertising. In the export expansion arena, CMI has for the past 10 years focused its market promotion in selected Asian markets which have to date yielded an increase in exports of around 25%.

Product development has been one area of emphasis for CMI. The organization has funded research for new products and the healthful properties of cherries. Some of this research has resulted in the findings of healthful benefits of cherries which were not well known earlier. In addition CMI works closely with manufacturers to stimulate the creation of new products for various market segments.

4.11. 2 Michigan Cherry Committee(MCC)

This is the Michigan demand expansion organization comparable to CMI. MCC collects funds for the cherry demand expansion program, most of which are passed through to CMI for the main joint demand expansion programs for tart cherries. MCC also funds relevant research projects for cherries. There is a very close linkage for the

programs, including joint staffing for both MCC and CMI.

4.11. 3 Cherry Industry Advisory Board (CIAB)

A main objective of the CIAB, which is the administrative board of the federal marketing order program, is to manage the supply of cherries which are available on the market in order to reduce any burdensome surpluses and to stabilize supply fluctuations. The marketing order strives to reduce surplus supplies and provide more of a balance between the supply and demand.

Each year the board analyses the crop sizes estimates, the carry over stocks, and the market demand. Market demand is based on a three year average of the past sales by the industry. With this information the marketing order program then determines if there is a surplus and if so what percent the surplus is of the new crop for that year. For example in 1998 the supply was 380 million pounds while the demand was 290 million pounds, this means that there was a 90 million surplus supply.

According to provisions of the FMO and certain policies set by the CIAB board, each processor and that processor's growers have several options for the surplus percentage of the new crop. These include; (1) storing in a special inventory reserve, (2) leaving some usually low quality, unharvested in the orchard, (3) selling in export markets, or (4) using surplus cherries for new products. A combination of these alternatives is permitted to meet the surplus percentage according to the marketing order.

4.11.4 Cherry co-operative (CherrCO)

CherrCo is a new federated marketing cooperative which was established two years ago. It has had success in that it has stabilized within season pricing of processed

cherries. CherrCo has turned what was previously a weakness into an industry strength.

There are major interactive effects between the marketing order and CherrCo . These are, however, somewhat indirect and informal. The marketing order, as administered by the CIAB, balances supplies with the demand. This sets supplies into better balance with the industry's demand and with the reduced surpluses facilitates CherrCo's marketing and pricing decisions.

4.11.5 Michigan State University (MSU)

Strong university research and extension support provide a significant technological, management and marketing information base to aid the industry for effective U.S. and global competitiveness. For example, the discovery of the healthful benefits of the cherries mentioned earlier have been based upon results of research from MSU. It is also interesting to note that the discovery of effective control technologies for insects and diseases which is a major strength for the industry were developed through the success of university research. MSU with USDA support also developed the important cost-reducing mechanical harvesting technologies.

MSU has a well established extension educational support system for growers and the industry which is critical from a technology transfer point of view. It is through this extension mechanism that growers and processors are kept informed of the latest technologies, economic issues and other aspects of management necessary for maintaining competitiveness by the industry.

As mentioned elsewhere in the paper, the industry is composed of several important support organizations. For these organizations to function most efficiently,

coordination of their efforts are needed . With assistance of MSU staff working closely with these organizations, an Industry Strategy Planning Council was established and is operating to strengthen the needed coordination of programs for industry benefit. The industry has made some additional progress on a number of key issues and problem areas as a result of the efforts of this group.

4.11.6 Michigan Agricultural Cooperative Marketing Association(MACMA)

MACMA was a cooperative group that represented growers in the pricing of cherries. It was a market information and price bargaining group for growers. MACMA was an affiliate of the Michigan Farm Bureau . Therefore it represented the cherry industry on certain issues that affect the tart cherry industry particularly at the government policy level.

The MACMA tart cherry program was recently (early 1999) discontinued. This was because the funding program failed in a recent continuance referendum among the industry growers.

4.11.7 Industry Strategy Planning Council(ISPC)

This group is composed of all key cherry industry organizations. It brings together top leadership from all major tart cherry organizations. The involvement of various industry organizations provides a much needed synergy among various programs for industry benefit. This council is an important organ for the industry, because it facilitates a broad industry perspective and analysis of needed strategic directions for continued economic viability. This forum is used to analyze and discuss certain types of broad industry problems and needs. It is also a facilitative body for the development of broad

strategic directions for the industry in order to remain competitive and to achieve high performance in serving its customers needs.

Since these various organizations who are part of the industry council have different objectives, through the coordinating efforts of the council these objectives are attempted to be more synchronized to accomplish overall goals of increased industry performance. This is particularly important because it facilitates certain kinds of actions that could not be accomplished as well by individual organizations.

Chapter 5

Analysis of industry weakness

5.0 Introduction to industry weaknesses analysis

This chapter presents a discussion on the weaknesses of the Michigan-US tart cherry industry. The importance of a weakness in regard to the industry's vulnerability, depends on how much the weakness matters in the market place. Several factors have been identified as weaknesses for the Michigan-U.S. tart cherry industry. A discussion of the identified weaknesses will be presented below. A summary listing of the weaknesses is found on Exhibit 2.

An industry weakness is something that an industry lacks or does poorly(in comparison to other competing industries) or a condition that puts an industry at a disadvantage

5.1 Low, Unprofitable returns to growers

A major weakness and priority area of concern in the tart cherry industry is the low grower prices, and unprofitable net returns which have been common since the mid-1980's. This is particularly important since growers form the supply base of the industry as indicated in figure Figure 3, show that since the mid- 1980's the cherry industry has experienced over planted acreage which led to excess production capacity resulting in chronic surpluses. These chronic surpluses have led to depressed grower prices which have been well below typical costs per pound for growers.

Exhibit 2

Weaknesses

A. Low, unprofitable returns to growers

- Surplus supplies
- Pricing structure

B. Historically weak prices

- High production costs
- Nature of the product

C. Acreage Cycle and excess production capacity

- Low supply/ high prices

D. Competition from other fruits

- Blueberries
- Apples

E. Cherry Quality

- Wind-Whip effects
- Soft cherries

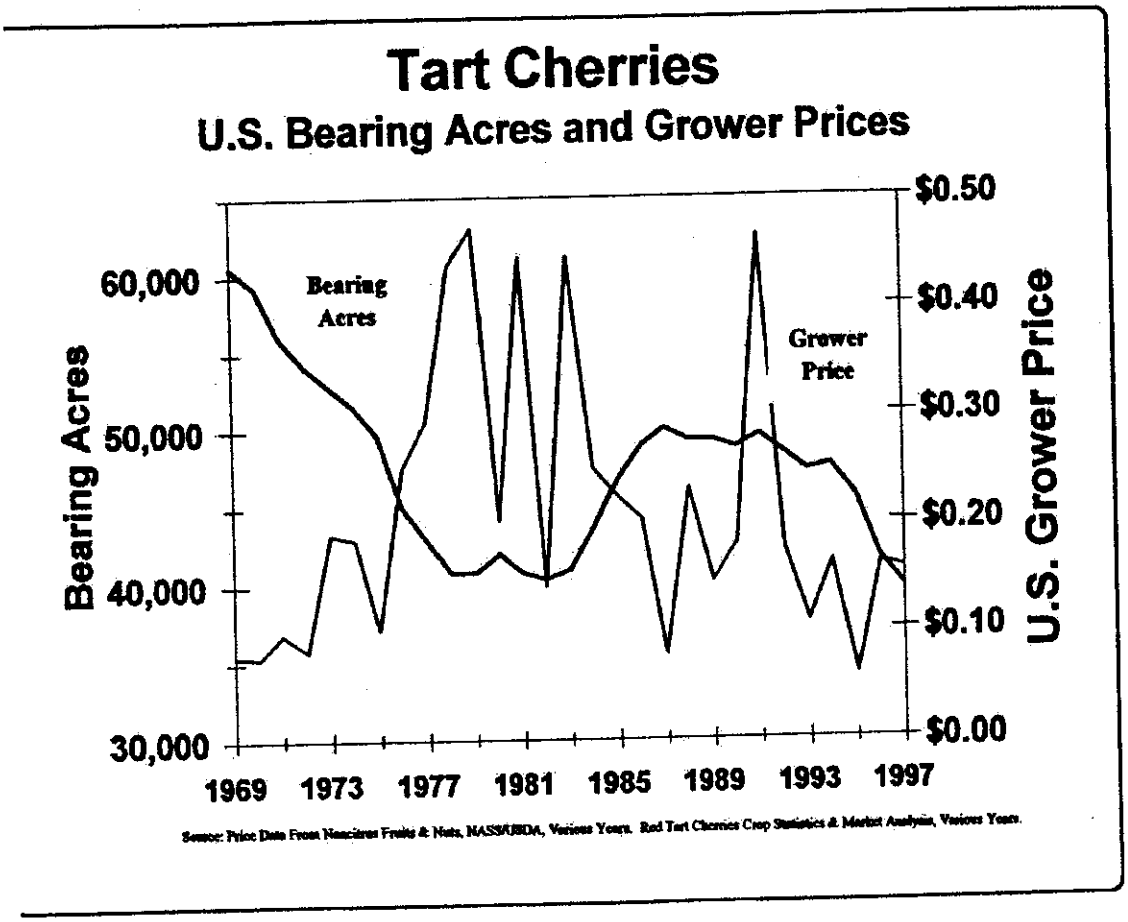
F. Threat of loss of critically needed pesticides

- EPA

G. Changing market conditions

- Consumer preferences

Figure 3


Tart Cherries
U.S. Bearing Acres and Grower Prices
Bearing Acres
60,000
50,000
40,000
30,000
Bearing Acres
Grower Price
$0.50
$0.40
$0.30
$0.20
$0.10
$0.00
U.S. Grower Price
1969
1973
1977
1981
1985
1989
1993
1997
Source: Price Data From Noncitrus Fruits & Nuts, NASS/USDA, Various Years. Red Tart Cherries Crop Statistics & Market Analysis, Various Years.

As mentioned elsewhere in the paper cherries have a high inelasticity of demand especially at the grower level. Hence a small surplus supply will lead to larger percent decrease in the price of cherries.

This low price state of affairs has been a major challenge to the tart cherry industry for the past 15 years. However, major strides have been taken to improve this situation. This includes the formation of Federal Marketing Order (FMO) and CherrCo. Both of these new programs were first implemented in 1997. They have since played important roles in somewhat improving processor and grower prices.

The potential benefits associated with these organizations were shown in the years of 1997 and 1998 when the industry showed some signs of moderate gains in grower returns, especially compared to the very low returns in 1995.

There is ample evidence that processors in contrast to the growers are less at risk from surplus supplies and the pricing structure. Price returned to growers are mostly determined by the processors. An elaboration of the pricing structure is discussed in the following subsection.

5.1.1 Pricing structure and approaches related to weak grower prices

Processors are key participants with important roles for the pricing of processed cherries and grower prices. The standard industry pricing practice is that the growers deliver their cherries to processors who will process and store the cherries and then sell them on the market at the going market prices for processed cherries. After obtaining these market prices during the marketing year, the processor in turn deducts their necessary margin for processing and other costs and then returns to the growers what is

left from the processed market price.

As a result of this pricing arrangement the growers are the primary participants who are facing the market price risks as compared to processors. It is therefore evident that the growers are the ones that are most hurt by the pricing structure-- especially if surplus supplies occurs. That is because the processor's cost and margin is paid first, while the growers are only residual claimants.

Adding to the economic difficulties for the growers is that the conventional approach for payment timing is quite slow for growers. Growers may receive little or no down payment at harvest time and only receive their final payments after their products are all sold which sometimes take a period of up to a year after harvest. Hence this practice has a slow cash flow impact on their incomes along with the stochastic nature of the prices which the growers eventually receive. This is particularly true since the prices the growers get is usually not determined until months after harvest. Sometimes growers do get a down payment when the crop is delivered and then are paid the balance or on a definite schedule of payments during the year. This approach means that growers both (1) carry most of the price risk and (2) have a delayed cash flow.

The nature of the tart cherry industry structure has contributed to the long time price fluctuations and low grower prices. The industry can be considered as a commodity selling industry such as corn, wheat etc. This is due to the fact that most of the tart cherries are often sold as processed commodity (mainly 5+1). This product is not differentiated in the eyes of consumers. In fact, few tart cherries are marketed at retail to consumers as cherries– but rather are marketed mainly as cherry pie, turnovers, etc.

Production costs for typical growers with typical yields during much of the 1990's have been 20 to 22 cents per pound with returns in the range of 5 cents to 19 cents per pound. This documents the extent to which most growers were not making net profits within the industry. Those growers who did survive have done so by continued depreciation of assets such as farm machinery and not making any new investments, or by net profits from certain other crops and/ or by off- farm income.

5.2 Acreage Cycle and Excess Production Capacity

The tart cherry industry has experienced large, negative impacts of the overproduction, low- price phase of the long term acreage-production cycle which started in the mid-1980's. This was caused by over planting during the short supply, high price phase of the cycle during the late 1970's and early 1980's. During this earlier period the acreage cycle was in a low production capacity phase, the supply of tart cherries was low and the prices were quite attractively high. Hence those conditions gave large incentives for the farmers to continue planting more and more acres of cherries despite continued advice from some tart cherry industry experts that over planting followed by surplus supplies were likely to develop. As a result of the large increases in acreage and new plantings in the late 1970's and early 1980's which led to an increased number of bearing orchards within a short period of time, the industry has now realized a prolonged overproduction period which led to a very difficult situation of suppressed grower prices. This over production and low prices continues to plague the industry since the mid 1980's.

These continuing economic difficulties of tart cherry growers have been particularly challenging for grower survival because negative net returns for many growers

have continued for a number of years. The main reasons for this continued economic challenging situation to growers has been the high production phase of the industry long term acreage cycle, coupled with slow growing industry demand. Thus there has been a continuing imbalance of industry supplies with demand, with surplus supplies putting considerable downward pressure on prices and growers net returns.

Although the surplus-production phase of the long term acreage-production cycle has been a major weakness of the industry for the last 15 years, the cycle is now evolving to a new phase which will involve a more appropriate balance of supply and demand and with a somewhat higher prices to growers. In the more distant future, the cycle will likely evolve still further into a supply- shortage, high price phase. These changes in the long-term cycle will provide substantial opportunities for cherry growers in the future. This opportunities will be discussed in a later chapter on the industry's opportunities.

5.3 Competition From Other Fruits.

Two of the main competing fruits to cherries are blueberries and apples. This is an on going challenge for the industry. It is conceivable that apples, which by quantity have considerably greater acreage and production in both in Michigan and the U.S. than cherries, will pose and even more of a challenge in the future as a potential substitute for cherries. Blueberries are also a competing fruit to cherries. Many products which are made from cherries such as pies, etc are also made using blueberries, apples and other fruit ingredients.

Data show that the demand for U.S. blueberries in the past few years has been trending up to a greater extent compared to that of tart cherries. This is due in part to

some basic properties that are found in blueberries and not found in tart cherries. That is, blueberries do not have a pit as compared to cherries --a feature that some food manufacture customers substantially prefer since consumers cannot crack a tooth when eating blueberry products.

Also, blueberries are easier to process than cherries which reduces the processing costs. The price trends show that apples have usually been of low price compared to cherries. This makes them cheaper as an ingredient for food manufactures who may therefore use more apples. Hence apples provide strong, low price competition in this market segment.

5.4 Cherry Quality

The cherry industry faces continuing challenges to supply high quality cherries as required by customers which includes consumers, food manufacturers, grocery retailers and food service firms. Quality challenges include providing processed cherries with no pits, no wind whip, no soft cherries nor cherries with poor color.

Quality challenges are in some respects accentuated by the fact that, unlike other fruits tart cherries are mostly harvested mechanically. The process of harvesting involves the shaking of the cherry tree such that the fruit falls onto a catching frame and then are conveyed into a tank of cold water. Since at this stage the cherries are ripe they are vulnerable to damage such as bruises.

Wind-whip can be a major problem in tart cherries. Wind- whip is a result of the leaves rubbing against the fruit leaving black spots and marks that will in turn affect the quality of the fruit in terms of raw product grade. Normally fruits that have been subjected

to wind whip will fetch a lower grade in the market, subsequently affecting the price and returns to growers. The industry has developed efficient color sorters which can sort out most of the wind- whip from the finished pack. As mentioned earlier wind whip can be of concern to the industry because it can encourage competition by other fruits such as blueberries and apples which are not affected by wind whip.

Other quality problems for cherries are the pits. Cherries compared to blueberries which do not have pits poses a threat as far as customers for cherries are concerned. The pits are more of a problem on soft cherries because it is difficult to get them out during normal processing since cherries will flatten out.

5.5 Threat of loss of critically needed pesticides tools.

The Michigan - U.S. tart cherry industry, like the apple industry, is dependent on the use of pesticides for the survival as far as the control of diseases and insects are concerned. The Environmental Protection Agency (EPA) has indicated that they may ban certain crucially needed pesticides based upon the Food Quality Protection Act. Although the industry is making continual progress on reducing the amount of chemical pesticides used through a variety of IPM techniques, at this time there has not been workable alternative control methods to allow the complete elimination of the use of chemicals in the control of the cherry damaging insects such as worms. These are major pests and potential quality problem in cherries if the needed pesticides are not available. It is important to note that without the use of certain key pesticides in cherry industry, there is very little chance of the industry survival unless and until alternative pest control methods can be developed through research.

5.6 Changing Markets Technologies and Competition

In a consumer driven market such as that of agricultural products, there is a great challenge to these industries to focus their efforts towards the needs and preferences of the consumers. Historically most cherry products have been used in sweetened desserts. It is evident that consumer preferences now are shifting from these products to others such as fresh fruits. Hence there is a somewhat downward trend in this market for some of the traditional sweetened cherry desserts such as cherry pie. The challenge here is for the industry to adapt to modern consumer demands and come up with cherry products that will match these preferences and demands.

Since other competing fruits such as apples are provided to consumers in a single serve packages as desserts as well as snacks, therefore they are attractive to modern, busy, time conscious consumers. Development of such servings in the cherry industry might help reduce the challenges of the slow growing demand and expand the market segment for these potential market.

Chapter 6

Analysis of Industry Opportunities

6.0 Industry's opportunities

An important part of the SWOT analysis includes opportunities. Opportunities for an industry refer to areas in which the industry can focus attention to improve its performance, competitiveness and economic viability. Opportunities may include new markets, new technologies, reduction in export barriers, new products, or changed strategic emphasis to more effectively serve customers in the changing markets.

This section of the paper presents a discussion on opportunities of the Michigan-U.S. tart cherry industry. An industry opportunity is a major favorable situation in the industry environment which offers considerable potential for industry growth and /or improvement. Opportunities can develop from an emergence of new or previously overlooked market segments, changes in competitive or regulatory circumstances, technologies, improved buyer and supplier relationship and other industry related activities that can enhance the industry's competitive position.[9] Opportunities are therefore areas in which the industry can focus attention to improve the performance, competitiveness growth and economic viability. Changes in national or global economies which result in increased per capita incomes and changes in consumer tastes and preferences may provide opportunities for commodity industries.

Within the Michigan-U.S. tart cherry industry several factors have emerged that seem to provide opportunities to the industry which will be discussed in the following sections. A summary listing of the opportunities is found in Exhibit 3

6.1 Dried Cherries

Dried cherries have been developed and marketed in relatively small but growing volumes for at least 15 years. Industry leaders generally believe that the market for dried cherries has substantial potential for further growth in future years. Dried cherries seem to be popular with many consumers who have tried them. This adds to the prospects for this opportunity for the industry to grow its overall markets with dried cherries.

The unique flavor of a tart- sweet taste that is different from other dried fruits aids the market growth prospects for dried cherries. Dried cherries also have a natural, nutritious taste and makes a nice snack as alternatives to candy bars or cookies. Another advantage with dried cherries is that they are adaptable to many food manufacturing and food service uses.

Currently dried cherries do not have wide spread distribution in the U.S. grocery stores, but this is improving. When consumers have them available for purchase in more stores, the resulting consumer familiarity with this unique product is expected to increase consumer's demand for dried cherries considerably. Dried cherries can be used by food manufactures as an ingredient in a number of food products. If dried cherries are used as an ingredient by certain kinds of manufacturers, with strong brand names, such as Kellogg, and if those products are successful, then they could be large volumes needed to meet this expanding demand for dried cherries.

Exhibit 3

Opportunities

A. Dried cherries

★ New product

B. Export market

★ CMI efforts

★ Demand for European market

C. Healthful properties

★ Cure for heart diseases

D. Cherries in meat

★ Taste improvement

E. Prospects of cherry paste

F. Penetration into new markets

G. Long term Acreage cycle

H. Adequate land and orchard site

★ Michigan

★ Washington

As mentioned above dried cherries do not have high penetration in grocery stores. Dried cherries are available in gourmet food stores and some selected super markets.

Currently the high prices that are necessary for dried cherries are a factor which contributes to limited retail grocery distribution and the attractiveness of dried cherries as an ingredient for some manufactures. Another limiting factor for retail grocery distribution is the retailers practice of charging slotting fees for many products including dried cherries. These slotting fee are charged to suppliers for gaining access to shelf space in grocery stores. For the processors of dried cherries, which tend to be small firms, these expensive slotting fees are a major deterrent to wider distribution and hence a limiting factor to exploit the potential market opportunities.

Dried cherries are expected to receive growing popularity in Europe and Japan in the future. This is in part, in part because of high consumer incomes and to meet health conscious preferences of consumers.

The Cherry Marketing Institute(CMI) has been instrumental in promoting dried cherries both within the U.S. and for export. CMI has had major joint promotional programs for dried cherries in partnership arrangements with the processors of dried cherries. Dried cherries may also benefit from information on the unique health benefits of cherry products, which recently have received a wide documentation from research.

The Cherry Industry Strategy Planning Council recently projected a five year forecast for all major market segments for tart cherries including dried cherries. These projection indicates that the dried cherry market may increase from 20 million pounds to 50 million pounds raw product equivalent (RPE) which would be a 250% growth within a

five year period. Considering the ratio of a Raw Product Equivalent (RPE) of 5-7 pounds of raw cherries which are needed to produce 1 pound of dried cherries, this can be a large and important increase in demand because of the potential impacts on the volume of raw cherries which may be marketed as dried cherries. With a 7.7. raw to dried ratio a future market of 50 million pounds of raw cherries would make a 6.5 million pounds of dried cherries. If the dried cherry market were to grow more than the projected 50 million pounds, this would expand the demand for raw cherries by 7.7 times the incremental growth in dried cherries.

Also any growth in the dried cherry market means an increase in demand for raw cherries of 7.7 times that volume. Prices received for dried cherries by processors would need to increase by 7.7 times greater than any increases in raw product prices. This could somewhat contain the demand growth, if the resulting higher prices for dried cherries exceed the purchase threshold of many consumers and /or industrial and food service customers

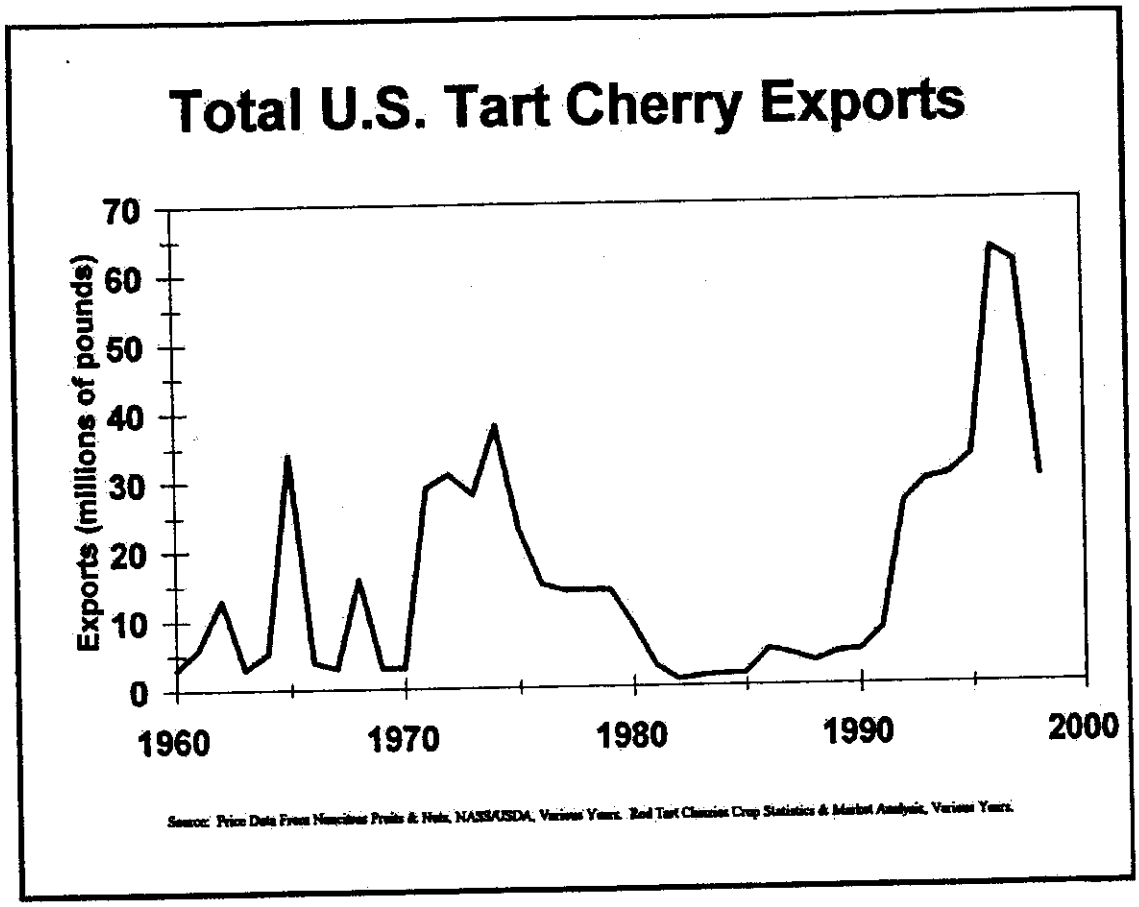
6.2 Export Market

Export markets for U.S. tart cherries have grown substantially during the decade of the 1990's (Figure4). These are expected to continue to provide excellent opportunities for expansion of export markets still further in the future as well. Although exports of cherries and cherry products were close to zero during the 1980's, more recently, however, a significant portion of cherries produced in Michigan and the U.S. are sold in export markets. For example during both the 1996 and 1997 crop years a total of 60 million pounds was exported to Europe and Japan.

Most exports in the past have been canned, water pack and more recently some IQF cherries. On the future, dried cherries seem, to have opportunities to expand into export markets as well due to their uniqueness which is likely to appeal to high income consumers in Europe.

Export market opportunities will be enhanced if the industry, especially through CMI and processors, can continue to promote awareness of the product and the underlying healthful properties of cherries in these export markets. In addition the expected recovery of the Asian economies may also provide increased opportunities for export market expansion including the Pacific Rim.

Figure 4


Total U.S. Tart Cherry Exports
Exports (millions of pounds)
70
60
50
40
30
20
10
0
1960
1970
1980
1990
2000

A study of the export market indicates an overall increasing trend in sales volume during the 1990's (U.S. cherry export graph 4). This growth trend is partly attributed to expanding demand in Europe, shorter supplies in Yugoslavia which was a major competitor and increased awareness of cherries in Japan. Substantial annual fluctuations in export volumes have been experienced by the industry and are expected to continue in the future, along with the opportunities for an upward growth in exports.

6.3 Healthful Properties

The increasingly well- documented healthful properties of cherries particularly combined with their unique bright red color, a trait that many merchandisers believe enhances the overall eye- appeal compared to other fruit products, offers a huge opportunity for the tart cherry industry to expand markets. For example, promotions emphasizing healthful properties used by CMI, such as information that just 20 tart cherries per a day could reduce inflammatory pain and benefit the consumer with antioxidant protection and reduce the risk of heart diseases and gout, seems likely to increase the demand for cherries among many consumers.

In addition to the health benefits that are linked to cherries, some processors are working on developing new product innovations for cherries. One of these is the use of dried cherries in snack bars and packs. Cherry paste for snack bars is also being explored. The low quality cherries that would not be normally processed for other products can increasingly be used for cherry juice and marketed as a healthy juice through food service outlets and grocery stores. These will provide opportunities to expand the use of cherries

hence an overall market expansion.

6.4 Cherries in meat

Research has shown that cherries can be used in red meat such as hamburger and sausage, to improve the taste of the meat, as well as the juiciness and reduce the fat in the meat. This unique characteristic of cherries offers opportunities to expand through appeal to meat processors. The red meat industry is currently facing low demands due to perceived health risks associated with red meat such as heart diseases and others. If the meat industry can and will build onto the results of the healthful properties research on cherries, this would provide a great opportunity for the tart cherry industry to benefit from this potential new market segment. Joint ventures between cherry processors and meat processors seems to provide a potentially effective way to take advantage of this new opportunity area for market growth.

While this seems to provide a great opportunity to the industry, there are also obstacles that reduces the potential. One major obstacle is a closely held patent that has been secured for this discovery which is held by a company with limited market expansion abilities. However, the patent is expected to expire in the next five years. Perhaps after the expiration of the patent more wide spread use of the cherries in meat will be tried by more firms. If this occurs, it could help the industry to take advantage of these unique and healthful characteristics and hence extensive opportunities to join hands with the meat industry to exploit these extra ordinary characteristics of the cherries.

6.5 Prospects for Cherry Paste.

Cherry paste is a potential new product that is being researched and explored for the growing breakfast bar and snack food market categories. Cherry paste may be used as an ingredient for the manufacturing of a cherry- flavored " low -moisture-activity" fruit filling.

Common examples of food products that use low- moisture- activity fruit filling include fruit filled snack bars, pastries, breakfast bars and dry cereals[19]. These food products comprise a large and growing market segment in the food industry. Hence there may be a substantial potential opportunity for the cherry industry within this food category.

According to available literature, the markets for breakfast/lunch snacks have shown an upward trend for the past 10 years. This is due in part to the fact that these bars are convenient (i.e can be eaten directly from packets) . They are also positioned as nutritious alternatives to certain traditional snacks such as potato chips and candy bars. These breakfast bars products are also often prepared and marketed as low fat or fat free products.

The potential for substantial market volume for a cherry paste in these product may exist if cherry paste can meet food manufactures's requirements for adequate product quality, competitive costs and needed technical specification. However, additional work is needed to further develop cherry paste to meet all these requirements.

Hopefully the cherry industry can use their technological and managerial skills to meet this manufacturer's specifications and develop cherry paste as a successful new product market segment .

6.6 Potential to develop New Markets as Encouraged by the Marketing Order

With the establishment of the Federal Marketing Order (FMO) which is responsible for managing the supply of the cherries that are available to the market, opportunities arise as a result of alternative uses for the surplus supplies for the development of new products that will benefit the industry. The provision of surplus cherries to be used for new products under the marketing order provides added incentives for processors to develop new products to make use of some of the surplus quantities. This will help build the long-run demand for cherries. This is also likely to lead to the expansion of new niche markets.

6.7 Long term Acreage Cycle

The changing evolution of the long term acreage cycle provides opportunities for the future, even though the recent overproduction phase of the cycle has posed major challenges and a major weakness of the industry during the last 15 years. The large over planting of cherry acres in the late 1970's and early 1980's led to an oversupply of the crop to the market which led to suppressed grower prices since the mid 1980's. This then led to greater need for market growth for cherries.

The industry is likely to be nearing currently the tail end of the period of surplus supplies and low prices. This provides an opportunity in the future for higher grower prices and potential profitability to growers which they have not had since the early 1980's.

This substantial opportunity can however, lead to a future threat to the industry as well. This is because the expected future profitable prices could provide incentives for

planting excessive acreage which could later lead to the same surplus problems as those created by the late 1970's over planting.

It is important to take proper evaluation of the long term acreage cycle of the tart cherries. When tart cherry industry has a short crop, so that available supplies are considerably less than the industry demand in preceding years, cherry prices typically increase considerably as buyers compete for scarce supplies. By contrast if supplies are large, prices drop considerably-- at the level usually below typical grower costs as shown by the historic production trends.

6.8 Federal Marketing Order (FMO)

As mentioned earlier in the paper, the FMO is a supply management program that is administered by the CIAB to help provide a better supply- demand balance for the industry. The FMO provides the industry substantial opportunities as a program tool to avoid persistent over supplies on the market. The FMO also provides opportunities to expand some long run markets for cherries through the encouragement of new products and export market expansion.

Another opportunity associated with the FMO is that when the acreage cycle reaches the short-supply phase in a few years, the annual fluctuations in the supplies can be managed through the FMO with the inventory reserve feature. This will help stabilize available supplies, reduce the severe shortages in short crop years and contribute to the maintenance of growth of cherry markets.

6.9 Adequate Land, Orchard Sites and Processing Capacity to Expand.

If the future demand for the tart cherry industry can be sufficiently expanded, both

for export and domestic markets, the industry can respond by utilizing its available land and sites for growing more tart cherries . Michigan which has available land that is suitable for cherry production could increase orchard acreage under production to meet the expanding future demand. It is also important to note that in addition to the desirable geographic position Michigan has, there is also the advantages of processing facilities that are highly developed in Michigan as well as the managerial skills.

Utah is not expected to be able to take much advantage of the potential for greater production in the future. This is because it is constrained by substantial urban pressures for much of its suitable cherry lands.

Washington may play an increasingly important role in future tart cherry production. This is because that state has large acreage of suitable irrigated land. They also have high yields per acre and hence have low cost of production per pound. The high yields in Washington might provide an incentive for new growers to plant tart cherries . Table 1 indicates that Washington state with its high yields per acre compared to any other cherry producing states, may respond to these positive factors -- especially with the higher prices that are expected as the long term cycle enters a short-supply, high- price phase.

Of particular importance is that if this big opportunity for the industry can not be handled properly, there is a substantial possibility of it later becoming a serious threat . A discussion of this issue is provided in the threat chapter.

Chapter 7

Analysis of Industry Threats

7.0 Industry Threats

Threats potentially affect the economic viability of an industry. Threats also point to the need for strategic actions to attempt to minimize the dangers from these threats. Certain factors in an industry's external environment pose *threats* to its well being.

A number of threats have been identified for the U.S.- Michigan tart cherry industry. A number of these are discussed in the following sections. A list of some of the threats is found in Exhibit 4.

Industry's threats may stem from the following types of generalized sources; emergence of cheaper technology, rivals introducing new or better products, declining industry demands, entry of low -cost producing competitors, new government regulations that are more burdensome to the industry, unfavorable demographic shifts, changes in foreign exchange policies, etc.

7.1 Food Quality Protection Act (FQPA)

Issues related to the FQPA are of priority to the cherry industry. This is because of the threats to the industry that are posed by certain actions that are being considered by EPA such as the banning of key pesticides tools which are crucially needed in the industry. If the proposed banning of certain crucial pesticides is implemented before effective alternative control techniques are available, this could pose a disastrous threat to the continued existence of the cherry industry.

Exhibit 4

Threats

A. Food Quality Protection Act (FQPA)

★ Banning of key pesticides

B. Economic changes in the apple industry

★ Low producer prices in apples

★ potential to switch acreage from apples to cherries

C. Over-planting of cherry acreage

★ Oversupply effects

D. Substitute fruits

E. Increase in world tart cherries

F. Controversies related to cherry marketing order

Both the market requirements of buyers and legal requirements demand a zero tolerance for worms in cherries. If key pesticides were banned, with current technologies, growers would be unable to meet these exacting, but unchanging ,market requirements for completely worm- free cherries. Buyers would then likely drop the cherries from their purchases and opt for substitute fruits which are worm free. A potential for a shift to imports also exists if these could be raised worm free by the use of pesticides or other methods in foreign countries. These changes could lead to a rapid demise of theU.S. tart cherry industry.

7.2 Economic Changes In the Apple Industry.

The recent economic difficulties of the U.S. apple industry also indirectly impact the tart cherry industry's economic situation. Due to some close relationships between apples and cherries, especially in regard to processing costs and prices for competing apple products, the negative effects(i.e. low apple prices and processing margins) that have recently affected the apple industry tend to have some spill over effects on the cherry industry. These economic difficulties in the apple industry to a degree pose some threat to the profitability of tart cherries.

This economic situation is true because most cherry processors, including many of those in Michigan, have been combining processing of apples and tart cherries. For these processors, apple processing has in the past provided large volumes to help spread many processing overheads costs. With the recent reductions in the apple processing margins and profitability, in many cases tart cherries must carry a larger share of the processors overhead costs. This reduces the returns which processors can pay the cherry growers.

If the economic threat to apple processing continues as a result of low prices and processing margins in apples, so that certain processors stop the processing of apples, as a result of low prices and processing margins in apples, this would mean that the total plant overhead costs that were formally shared between the two crops would then be borne by the cherries alone. Hence the even higher processing cost for cherries would likely still further contribute to lower returns to cherry growers.

The recent low prices for processing apples have led to a reduction in apple acreage. This might in the future reduce processors supplies of raw apples, which in turn may raise overhead costs per pound still further and cause them to lose markets and further reduce apple processing profitability. Such threatening developments could cause some processors to cease apple processing altogether. This would require tart cherries to carry even more of the processing overhead cost burden, especially if there were exits by processors from apple processing.

7.3 A Potential Threat of Future Over Planting of Tart Cherries

The high prices and short supplies in the tart cherry industry during the late 1970's early1980's provided an incentive for producers to substantially increase plantings. Thus over planting occurred. The later overproduction and resulting low price effects of this have been realized by the industry during the last 15 years. Higher prices that are expected to occur during the next few years as the acreage-production cycle reaches a short-supply phase could cause another round of over planting as occurred in the late 1970's and early 1980's. Thus this is an important future threat which could result from the short supply, high-price phase of long -term acreage cycle that is expected within a few years.

A trend of switching from apples to tart cherries is likely to take place in varying degrees in several apple producing states, including Michigan which is the second largest producer of apples in the U.S. as well as the nation's largest tart cherry producer. This could accentuate the possibilities of the threat of over planting. The threat associated with another round of over planting of tart cherries in future years has the potential to suppress prices again in the tart cherry industry as a result of the potential future over supply.

A potential by growers in Washington state of switching apple acreage to tart cherries as a result of recent lower grower prices in apples can also add to the potential threat of future over planting and another round of over production in the tart cherry industry. Washington poses the most threat since it has a well established irrigation infrastructure on very large acreage which could be easily converted to tart cherry production. Also Washington has an absolute advantage in the production of most fruits. Hence if the prices of apples which is the largest fruit in Washington, continues to slide down, Washington growers could substantially switch to another more profitable tree crop such as tart cherries. A constraint for Washington, but one that can be overcome, is that it does not have the appropriate cherry processing facilities. Washington could, however, develop such processing facilities.

7.5 Competing Fruits

Competing fruits such as blueberries, apples, peaches, strawberries, etc. pose continuing challenges to the tart cherry industry. Although those competing fruits probably are not most accurately described as large threats at the present time, they could develop into more serious competitive threats at in the future. Blueberries and apples are

the two most important competing fruits. These fruits have large supplies, and are often used by food manufacturers and bakery customers as alternatives to cherries for historically important products such as pies, pie filling, cobblers etc.

Data on production indicate that over the past twenty years both production and demand for blueberries grew more that of tart cherries. Some of the growth in demand for blueberries has probably come at the expense of potential cherry demand. In addition there is a potential for future surplus supplies of U.S. blueberries. If this occurs, the oversupply of blueberries will lead to lower blueberry prices . This could render them more attractive to food manufacture buyers in terms of price compared to tart cherries. This could lead to the long term use patterns and preferences which favor blueberries and decrease the demand for tart cherries. This might be particularly likely when the cherry acreage cycle moves to a low supply - high price phase within a few years.

Blueberries do have some inherent advantages over the cherries. One of the most important of these is that blueberries do not have a pit as do cherries. Thus a challenge for cherries is to attain pit-free processed products in order to meet the competitive threat of the blueberries. Another advantage is that blueberries have low processing costs compared to tart cherries. Blueberries are also highly competitive to the tart cherries because of their unique color and hence eye appeal compared to certain other fruits like apples.

Although other fruits do not seem to pose a serious threat like blueberries at the moment, it remains to be worrisome given the production cycle that occurs in the cherry industry. If certain other fruits increase in supplies, either from the U.S. or from foreign producing countries, especially when tart cherries move to the high price phase of their

long term acreage cycle, this could limit the long-term demand growth for cherries.

Apples also pose a continuing challenge as a low- price competing fruit. A price decrease for apples such as has occurred recently, can lead to a shift in demand from cherries to apples since some of the products that are made out of cherries are also made using apple slices. If the prices of apple slices become even lower in the future, this could become an even greater threat to the demand for cherries. This is especially so since apples are a very important ingredient fruit for many manufacturing uses and apples have no danger of a pit as cherries do.

7.5 Possible Increases in World Tart Cherry Production

The threat linked to this issue is that of greater supplies at lower prices by some competing countries. Better information is needed about the planting and production potential of these countries especially China, Chile and other countries in Eastern Europe which might expand tart cherry production. Appropriate estimates regarding the likely future competing supplies are necessary. Then the U.S. cherry industry could be better positioned to design the needed strategic plans in the event that these other competitor countries might flood the market. For example China with large agricultural production capabilities could go into the production of tart cherries and ruin the markets by dumping its excess production into the U.S. as it has done with apple juice

7.6 Controversies Related to the Tart Cherry Marketing Order

The federal marketing order for supply management is an important support organization and program for the tart cherry industry. There are a number of controversial issues which are being debated in the industry regarding the marketing order.

Most or all of these can probably be resolved in satisfactory ways. Some industry participants threaten, however, to work for the elimination of the program if their recommendations are not implemented. This could become an economic threat to the industry as a whole because of the potential benefits from this program. The industry could loose an institution which is a major contributing program for economic gains to the industry, particularly as regards to the prices that are received by growers.

The FMO provides a major positive program force in the industry since it is responsible for surplus supply management and surpluses have been a major problem area. As has been explained earlier, the marketing order strives for a demand /supply balance with less surpluses or shortage of supply. Due to continued fluctuation in the supply of tart cherry in the market, the marketing order can in the event of overproduction reduce the surpluses of available supplies including the storing of some quantities such that when there is a shortage later, the storage reserve can be released to the market to supplement the shortage of supplies.

The threat in this case is perhaps some relatively minor controversial issues as regards the role of the FMO, i.e. if the minor differences in opinions by the industry leaders, could lead to enough fragmentation such that during a future continuation referendum, they decide to vote out the entire program. This could lead to a loss of great opportunities in the industry and result in some periods of surplus supplies with very low prices along with shortages of supplies at other times..

Chapter 8

Summary and Concluding Remarks

Approaches for industry strategic planning and coordination can make use of a number of concepts from the firm strategic management process. However, it must be noted that there are some fundamental differences between strategic management with a firm context and strategy planning and implementation with an industry context. That is, an industry approach encompasses broader aspects where as a firm strategic management approach emphasizes the perspective for the firm. Of particular importance is the fact that with the firm context, there is a greater element of management, where as in an industry context it is difficult to manage all of the participants to any similar degree! Hence, selectivity and facilitation on certain issues and aspects are likely to be needed to aid the industry in progressing toward its needed strategic directions for continued competitiveness.

The framework of an industry also involves more emphasis in process initiation which is more difficult and more complex than for strategic management for a firm. The subsequent phases involve a number of similarities to those of the firm. That is, situational analysis is appropriate for both a firm and an industry context. Strategic planning then followed by implementation and strategy re-evaluation are also all appropriate phases for both firm context and with the industry.

A main objective of the industry strategic planning is to be able to help position the industry such that it can be able to be competitive and enhance its chances of economic survival. This is aided by appropriate SWOT analysis for the industry combined with the

identification of appropriate strategies. A strong implementation capacity is also a pre-requisite for the success of an ISPC process.

An important lesson from the ISPC approach is that it can be widely applied in a variety of industry situations. Some modifications are likely to be needed to best fit the specific situation of an industry.

While a SWOT analysis is an important component in an ISPC with an industry, a through synthesis of the strategic issues is important for the success of the ISPC. For example in the Michigan-U.S. tart cherry industry it is conceivable to conclude that given the various strengths and potential opportunities tend to complement each other and to support the implementation of various specific strategies to benefit the industry. Specific strategies can be chosen to be pursued by the industry with various success levels. For example a growth positioning by the industry may be an achievable strategy by the industry provided the industry uses its strengths through the CMI and processors to expand its export market as well as the development of new products which could also be made possible through the technological innovation.

Since frozen fruit and related low-cost commodity efficiencies have long been a major focus in the cherry industry, a shift in the future to more emphasis on value -added strategies may provide improved performance in the industry.

Finally there is a great lesson for me in terms of the importance and usefulness of an ISPC approach to aid certain industries with strategic planning. The approach can be used in various agricultural industries. Of particular importance is the need for those involved in the ISPC to have a thorough understanding of the industry's driving forces,

major problems and current situation. This can be aided by a thorough situational and SWOT analysis and appropriate communication of the findings of the situational analysis to the industry stake holders.

BIBLIOGRAPHY

1. Cook, J. Strategic Planning for Small business. NTC Business Books 1994

2. Digman, D. Strategic Management, Concepts Decisions and Cases. Business Publications 1990

3. David, H. Strategic management: Theory and practice. Pergamon Publishing1994

4. United States Department of Agriculture: NonCitrus Fruits and Nuts 1998

5. Glueck, W. Business Policy: Strategy Formation and Management: New York: McGraw-Hill, 1980

6. Great lakes Fruit Growers News May 1998

7. Kelsey, M., G. Kole, J. Nugent and J.Bardenhagen " Cost of Producing tart cherries in Northwestern Michigan", Michigan State University, Cooperative Extension Service, Extension Bulletin E1108, January 1997

8. Lyford , C. An Analytical Framework for Industry Strategic planning and Coordination, Unpublished Ph.D. dissertation, Michigan state University 1998

9. Pearce, J. and Robinson Strategic Management, Formulation and Control

10. Peterson, C. "The strategic Management of Entrepreneurial Agribusiness". Unpublished research, Michigan State University, Department of Agricultural Economics ,1996

11.Porter, M. E. Competitive Strategy, Techniques for Analyzing Industry and Competition. Free Press: New York

12. Porter, M.E. Competitive Advantage, Creating and Sustaining Superior Performance. Free Press: New York 1985

13. Ricks,D. And Hinman, D. Changing economic conditions in the tart cherry industry Michigan State University, Staff paper No. 93-59, November 1993

14. Ricks, D and Hinman, D. Tart cherry supply fluctuations and acreage cycle Michigan State University, Staff paper No. 93-61, December 1993

15. Ricks ,D., Hamm, L and Chase-Lansdale. The tart cherry Sub-sector of the U.S. Agriculture: A review of Organization and Performance

16.Ricks, D. And Woods T. " Changing competitive position and Key Market Trends of the Michigan Apple Industry"

17. Status and Potential of Michigan Agriculture (SAPMA): Special Report. Michigan Agricultural Experiment Station, Michigan State University, 1998

18. Steiner, G. Strategic Planning: "What every Manager Must Know" New York: Free Press, 1979

19. Sterns, J., Ricks,D. And Cash, J. Tart cherry paste as a potential new market; Economic and marketing considerations, Michigan State University, Staff paper No. 98-39 October 1998

20. Thompson, A. and Strickland, J. Strategic Management. Concepts and Cases: Irwin Inc., 1995

21. Thune, S. and House, R. " Where long-Range planning pays off". Business Horizons, 1970

22. Woods, T. Su-bsector Strategic coordination Towards Improved Performance; A Framework and An apple Sub-sector Case Study, Unpublished Ph.D. dissertation, Michigan State University, 1995