THE UNIVERSITY OF CALGARY

# CASH, COWS, AND CONSERVATION

by

CHRISTINA CHAN

A MASTER'S DEGREE PROJECT
SUBMITTED TO THE FACULTY OF ENVIRONMENTAL DESIGN
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ENVIRONMENTAL DESIGN
(ENVIRONMENTAL SCIENCE)

FACULTY OF ENVIRONMENTAL DESIGN

CALGARY, ALBERTA

AUGUST, 2000

## ABSTRACT

**Cash, Cows, and Conservation**

**by Christina Chan**

**Prepared in partial fulfilment of the requirements of the MEDes Degree in the Faculty of Environmental Design, University of Calgary**
**August, 2000**

**Supervisory Committee: Dixon Thompson (Supervisor) and Mel Wilson.**

In this Masters Degree Project, recommendations for a business/marketing strategy have been developed for the Producers of the Diamond Willow Range [PDWR], an Alberta-based organic beef marketing company. These recommendations are intended to assist PDWR in planning its medium- to long-term growth management.

The recommendations were developed through study and application of case studies in business, analysis of the organic industry, and principles of sustainable agriculture and development. It was concluded that producers in the organic industry will face considerable change and growth as the industry matures. Therefore, it was recommended that PDWR adopt strategies that would: enhance customer service, sales and brand loyalty; identify opportunities to expand the market for organic products; enhance production practices for long-term efficiencies and potential product differentiation; identify new certification opportunities for marketing leverage; and seek synergistic benefits from new members to the company.



Key words: agriculture, organic agriculture, organic beef, sustainable development, sustainable agriculture, marketing, certification.

**Project Title: Cash, Cows, and Conservation**
**Written By: Christina Chan**
**Written For: Faculty of Environmental Design, University of Calgary**
**Date: August 2000**

## EXECUTIVE SUMMARY

The overall aim of this study is to develop a business strategy for Producers of the Diamond Willow Range [PDWR], an Alberta-based corporation which sells organic beef. In developing the strategy, the concepts and practices of organic beef production were examined within the larger context of organic foods in general, sustainable agriculture, and sustainable development. Literature reviews on these larger concepts, and key informant interviews with participants in the organic foods industry were conducted to gather information relevant to development of final strategy recommendations. An organizational analysis of the company was also conducted to identify relevant strengths, weaknesses, opportunities and threats which affect the company's growth management process.

Organisationally, Producers of the Diamond Willow Range's strengths lie in the high commitment of its members, low corporate overhead costs, and reasonable profitability. In addition, its small size has allowed members to make relatively quick decisions through consensus. PDWR members have had to undergo sometimes difficult and expensive changes in production practices, which may be a contributing factor in restricting the amount of volunteer labour which is needed to run the business end of PDWR. Members are relatively weak in marketing and customer service skills (resulting in some lost customers), and its small size means that members continue to be vulnerable to volatile swings in cost of supplies and services which are required for cattle production. Currently, all members are organic beef ranchers, but some members have indicated an interest in working with other key participants in the organic industry.

With regards to organic certification, PDWR has benefited from subscribing to the standards of the Organic Crop Improvement Association. It is very well known, with many Canadian chapters to turn to for production support. In addition, the OCIA provides marketing support in the form of product labels for certified producers, and like most organic standards worldwide, OCIA expressly forbids genetically modified organisms [GMO's][1]. There was initial confusion with organic livestock certification, mostly due to inexperience of auditors with livestock production practices (most of them came from a crop production background), and PDWR members have not been satisfied with some of the products and processes which are required to comply with OCIA standards. Currently, OCIA is in the process of improving its audit protocol, in order to make OCIA-certified products acceptable for import into the European Union market.

Although PDWR's certified organic practices will contribute to sustainable development, PDWR currently does not subscribe to a formal audit system which would allow members to make an objective measurement of the sustainability of their processes. Part of the problem is that there are few formal systems which exist and, more importantly, the science of ecosystem management is still not fully developed or understood. Nevertheless, it is predicted that sustainable agricultural development can help producers to achieve high productivity with low input costs, while also maintaining landscape integrity. In particular, livestock production in Southern Alberta is considered to be an excellent framework for sustainable development, due to the nature of the animals and ecosystem involved (cattle become modern-day "bison" out on the prairie). Of the few audit systems which do exist, none offer labelling or marketing support. However, growing consumer awareness of and concern over the impact of agricultural operations on human health may make "sustainably-produced" labelling an advantageous product feature in the future.

---

1

Refers to organisms which have been created through inter-species gene-splicing engineering techniques, and which would not otherwise have occurred in nature.

Product differentiation will become an issue as more competitors enter the growing market for organic foods. Europe and Japan continue to be the dominant international markets for organic produce. In Canada, the new national standard for organic products (CAN/CGSB-32.310) is expected to help producers to enter foreign markets (especially Europe). Worldwide, there is a growing movement to resist genetically modified foods, and organic producers such as PDWR can capitalize on this consumer trend by marketing its products as strictly GMO-free. Locally, PDWR faces competition from producers who are large, well-connected and sophisticated marketers. Producer associations such as Earth to Table (Calgary) and Island Chefs Cooperative (Victoria) have been formed to promote the advantages of buying fresh, locally-produced, natural/organic foods. These encouraging developments in the Canadian market indicate continuing growth and interest in organic foods.

In order to continue to grow with the industry, PDWR's strategy should focus on reducing costs and increasing revenues, while still keeping true to its mission statement. Several strategies are suggested as follows:

- **Hire a professional, full-time salesperson/marketer.** This will allow PDWR to compete more aggressively in the marketplace, and devotes much-needed resources to important marketing tasks.
- **Seek networking opportunities with other organic industry producers.** This will help PDWR to identify and exploit opportunities to develop synergies (for production and marketing processes) and share valuable information regarding the organic industry.
- **Subscribe to a sustainable agriculture audit program.** This is a long-term strategy that will help PDWR to differentiate its product in the market.

- **Seek certification to the new national standard.** This will help PDWR to position itself for future marketing and export to Europe and other international markets. Information gathered from interviews suggest that the Canadian organic standard will be the future benchmark for organic product marketing, and it promises to be a valuable tool for marketing to domestic and international markets.
- **Seek new PDWR members from suppliers, processors, distributors, and retailers.** This will allow PDWR to expand/improve its production, marketing, and delivery processes. Benefits should include: better economies of scale; streamlined costs; favourable business agreements with suppliers and downstream service providers; and improved stability of customer base.

PDWR's initial foray into the organic industry has put members through a steep learning curve. Members have acquired valuable experience in the downstream aspects of beef marketing and the organic industry in general. But the quick pace of growth in the industry means that PDWR must be innovative to maintain its position in the market.

## TABLE OF CONTENTS

# CHAPTER 1: INTRODUCTION

## Introduction

The concept of sustainable agriculture first gained prominence in the 1960's and arose out of a concern that conventional agricultural practice, with its reliance on the heavy use of chemical pesticides, herbicides, and fertilizers, may pose a risk to human and ecosystem health. Although sustainable agriculture is seen to be an alternative to conventional practices, there seems to be little consensus on which production processes constitute sustainable practices, and indeed what concrete benefits would be realized from such practices. However, based on studies (some of which are long term and ongoing), there is emerging evidence that certain chemical-free practices can be beneficial in conserving the resource base and produce satisfactory, if not superior yields compared to conventional practices. Nevertheless, there still remains much to be discovered under the sustainable agriculture "umbrella", and not necessarily only in terms of science and research. Indeed, the term "sustainable agriculture" has also been co-opted by politicians, grassroots non-government organizations, consumer advocacy groups, agricultural producers, and industry. Each of these parties has a stake in the development and application of sustainable processes, but the lack of solid evidence to support sustainable agriculture as a *practice* has been detrimental in establishing a firm definition of sustainable agriculture as a *concept.*

In light of this dilemma, and in an attempt to provide "sustainably-produced" foods for consumers in the meantime, certain agricultural producers have developed production processes which specifically seek to reduce or eliminate chemical use and provide a measure of environmental protection. These programs have been variously called "natural", "organic", and "holistic resource management". Of these, organic agriculture generally includes

audit/certification assurances of farmers' practices according to strict criteria. Thus, organic agriculture is an attempt to provide consumers with an alternative to foods which are produced using conventional practices which some consumers may not agree with.

There are signs that consumers and the general public are becoming more aware of and concerned over the risks associated with the level of chemical usage which is typical of conventional agricultural methods. There are animal studies which show that high levels of exposure to certain agricultural chemicals can cause specific cancers and diseases. These have in turn brought the conventional food industry under the suspicion that their products may not be as safe as previously thought. Although these fears cannot be fully vindicated by the current body of scientific literature, the increased attention to this issue will no doubt continue to prompt additional studies on the effects of chemical usage in agriculture on human health. In the meantime, fear for one's health and safety, as well as the health and safety of one's children is an undeniably powerful force in consumer decision-making and public policy. As a result, the organic foods industry has seen steady growth in sales in North America, Europe, and parts of Asia. Governments in these regions have endorsed the organic trend by participating in developing related trade policies and production standards.

For its part, the organic industry in North America is struggling to mature into a sector with a unified presence. To date, the industry is characterized by a small number of independent producers, with some belonging to grassroots-style co-ops and regional marketing associations. Unlike the majority of conventional producers such as cereal and livestock growers, many organic producers enjoy extensive control over the processing, marketing, and distribution of their products. But the attractive growth projections for organic foods has prompted food giants such as General Mills Foods, Inc. to position themselves to enter the market, thereby potentially threatening the status and power of independent organic producers. These developments and the

growth of the market in general ensure that the organic industry will undergo significant change within at least the next decade. In particular, small producers may need to modify their business strategies to ensure control over their own economic success.

**Statement of Purpose**

The purpose of this Masters Design Project is to provide a medium- to long-term business strategy for the Producers of the Diamond Willow Range, an Alberta-based incorporated company which markets organic beef in Alberta and British Columbia.

As outlined in "Figure 1: MDP research strategy and context", the strategy will be derived from the following major discussions:

- Sustainable Development and Sustainable Agriculture: Since organic agriculture and organic beef production function within the sphere of overall sustainable development, it is important to understand the fundamental issues surrounding sustainable development and sustainable agriculture, including growing awareness, environmental imperatives, public perceptions, and incentives. These are larger issues which will have an impact on organic agriculture as an industry.

- Organic Agriculture and Organic Beef: Due to the rapidly changing perceptions of organic food in general, it is important to understand the issues surrounding organic agriculture, including philosophical bases, production methods, certification, and credibility with consumers. Recent developments in the organic industry -- and their implications for producers and consumers -- will also be discussed. These issues will

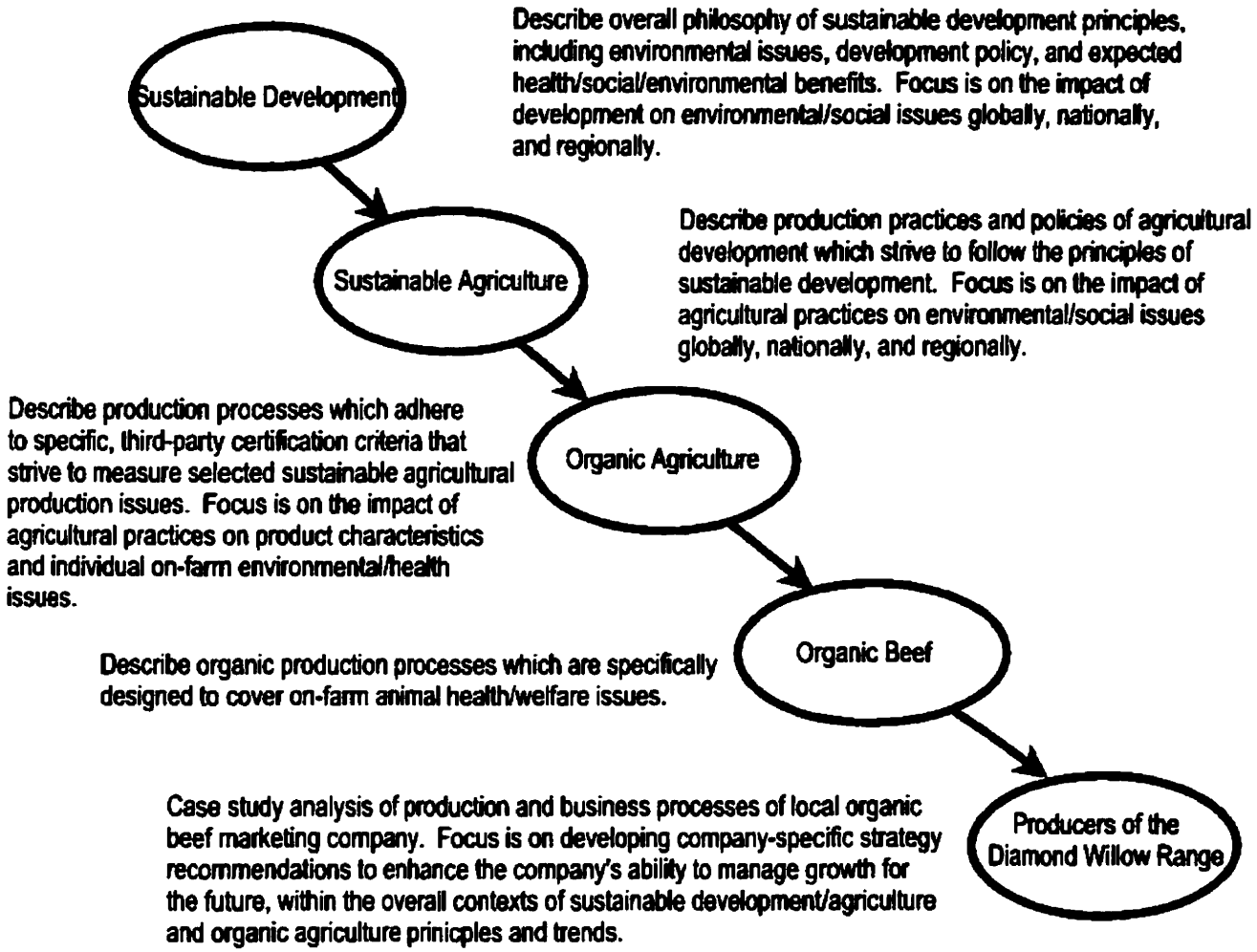
directly influence the marketing direction for the product.

- Organizational Analysis: An analysis of the company's current operations, human resources capabilities, financial capability, and management status is essential to determine the company's ability to manage growth, adapt to industry and consumer changes, and seize business opportunities.

- Competition / Product Marketing Analysis: Identify and assess the major competitive forces and product marketing trends in the organic beef industry. This forecast will be important in building a business strategy that is pro-active and adaptable enough to exploit new opportunities.

Finally, several recommended strategies will be presented, based on analyses outlined above.

Figure 1: MDP research strategy and context



**Statement of Need**

There are two main forces driving the need for this project. The first and most obvious reason is directly related to survival and growth of the company. After three years of operation, Producers of the Diamond Willow Range [PDWR] has proven that logistically speaking, a group of commercial-scale ranchers can profitably produce and market organic beef for a specialized target market. PDWR's co-operative-style structure, although not without some minor problems, is a sound approach which emphasizes collective effort (possessing the safety and strength of numbers), but which still allows producers to maintain a wide latitude of independence, especially in terms of production practices and marketing opportunities in non-organic (i.e., conventional) markets. PDWR is now at the point in the classic business life cycle where growth management is the most important factor that will determine long-term survival. The critical turning point will come when PDWR moves beyond this stage, to focus more on cost stabilization, and maximizing profit margin and target market share.

To a large extent, the group's corporate philosophy will determine the direction that PDWR will take in its business strategy, which may include production practices (product characteristics), administration (modifying/streamlining overhead expenses), marketing (who is the target market and how to sell our product to them), delivery systems (large vs. small scale, humane treatment of livestock), and finance (capital structuring).

However, what is perhaps even more important in crafting a business strategy is an understanding of the organic industry within which PDWR operates, both in the present day and more critically in the future. A successful growth management strategy will depend largely on anticipating and successfully exploiting future changes and trends within the industry, and dealing with threats to the industry that may arise from outside the industry, such as government

regulations and trade tariffs.

Based on its understanding of the industry, PDWR must then look to its own organizational capabilities, its strengths and weaknesses, before it can fashion a business strategy that is both realistic and feasible to implement, and which will move PDWR towards realizing its overall corporate goals and objectives. Essentially, this is the growth management process.

The second major reason driving the need for this project is less pragmatic, but has perhaps a more far-reaching impact. The organic beef industry is still relatively new and undeveloped in Canada. If PDWR can succeed as a profitable business for the long term, then this will help to demonstrate that sustainable agricultural production practices (as dictated according to organic certification standards) can be beneficial to the pocketbook, as well as towards conservation of natural resources.

The recommendations of this report are tailored specifically for PDWR, and the organizational analysis of PDWR applies uniquely to this company, however, the sustainable development analysis and the industry analysis sections of this report can be helpful to other producers and/or producer organizations in crafting their own business strategies.

Therefore, although the aim of this MDP is to help PDWR to prepare and implement a successful business strategy, this MDP may also contribute to the relatively scarce literature on the organic beef industry in Canada, and act as a template for other beef producers in preparing their own business strategies.

## Methodology

Information for this MDP was collected through an extensive literature review and direct interviews with key informants. The methodology is explained in detail below.

### Literature Review

There exists an extensive body of literature on the general topics of agriculture and sustainable development. In contrast, the study of sustainable and organic agricultural practices has captured relatively recent attention, and published resources are more difficult to seek and obtain. In particular, there is a concern that "un-conventional" practices such as sustainable/organic agriculture, which may be perceived to be undermining the status quo of industrial agriculture, enjoys far less scientific scrutiny than its conventional counterpart. This may be partly due to limited funding sources; unlike the agro-chemical industry, there are few, if any, companies in the business of organic agriculture which are capable of investing in expensive, long-term studies of alternative, chemical-free production practices. Another reason may be political; it may be more difficult to promote study of alternative practices in an environment where the conventional agriculture industry has developed a network of well-established, politically active interest groups, including marketing boards, industry lobby groups, and producer associations.

With these limitations in mind, a literature review was conducted as part of this research in order to form a basic understanding of the issues related to the objective of this MDP. Although Internet websites can be useful, credible, and timely sources (especially those sponsored by government agencies and reputable organizations), the literature review relied heavily on published hardcopy articles and books. In this author's experience, Internet searches

require an inefficient amount of effort to weed out unreliable and biased commercial sites to arrive at questionable and inherently transient posted information. Nevertheless, a few government and industry-related websites were consulted for certain statistical and trend-related data. Criteria used in the selection of published resources were:

- relevance to sustainable and organic agriculture, especially regarding production practices, and product marketing implications;
- credibility of author or agency;
- current publication date;
- availability; and
- cost.

The literature review focussed on the following five topics: definition of sustainable development; sustainable agriculture theory and practice; production practices of and consumer demand for organic agriculture; demographic trends in food retailing and product marketing; and business life-cycle planning. The relevance of these topics towards the creation of final recommendations is explained more fully in the following sections.

*Sustainable Development*

The company, Producers of the Diamond Willow Range [PDWR], operates in a specialized agricultural sector whose roots arguably began with the movement towards sustainable economic development principles. In order to develop recommendations for a business strategy for this company, it is appropriate to acknowledge and apply these principles, at least in some basic form, to the formulation of such strategy. It is therefore important to understand the basic tenets of sustainable development philosophy. Although there has been

much print devoted to this subject since the late 1960's, there remains a troubling variance in definition on the subject, even up to recent publications.

The Organization for Economic Co-operation and Development has published numerous guides which tackle issues related to application of sustainable development principles to economic reality. Several of these books were consulted as a starting point to develop a working definition of sustainable development, including The Economic Appraisal of Environmental Projects and Policies: A Practical Guide (1995), Life Cycle Management and Trade (1994), and Managing the Environment: The Role of Economic Instruments (1994).

For a closer look at the business enterprise perspective of sustainable development, further readings included Beyond Growth: The Economics of Sustainable Development (Daly, 1996) and The Natural Step for Business (Nattrass & Altomare, 1999).

Some of the resources were identified from a Calgary Public Library WebPac key words search conducted on the following: sustainable development; resource management.

*Sustainable Agriculture*

Sustainable development principles, as applied specifically to the agriculture industry, similarly influence the operating environment for PDWR. Therefore, in order to develop final recommendations for a business strategy, it must be recognized that the theory and practice of sustainable agriculture will be the default framework around PDWR's own operations and philosophy. Admittedly, although it is not imperative that PDWR constrain itself within this framework as it evolves as a corporate entity, it is nonetheless important to understand the general philosophy and practice of sustainable agriculture.

To this end, a literature review was conducted to identify the practices and theoretical benefits of sustainable agriculture. General reference books included The Consumers' Guide to Effective Environmental Choices (Brower & Leon, 1999), The Natural Step for Business (Nattrass & Altomare, 1999), and Prosperity Without Pollution (Hirschhorn & Oldenburg, 1991).

Of particular value were texts by academics in the agriculture field, including "Environmental Audits for Agriculture" (Greenfield, 1997), "Farm Policies and the Sustainability of Agriculture: Rethinking the Connections" (Schaller, 1993), and "The Economics of Organic Grain and Soybean Production in the Midwestern U.S." (Welsh, 1999). In addition, the Henry A. Wallace Institute for Alternative Agriculture is a U.S.-based non-profit education and research organization which publishes The American Journal of Alternative Agriculture (a peer-reviewed scientific journal) and sponsors research into alternative agriculture techniques. Its advisory panel includes academics and scientists, and it maintains a high profile in Washington as a representative of the sustainable agriculture industry. Its website, which contains numerous published studies and additional general information on sustainable agricultural practices, was also consulted.

In order to set sustainable agriculture within the broader context of economics and trade, Lester Brown's "Who Will Feed China?" (1998) and several newspaper articles were helpful in identifying the overall perceived need and demand for food produced using sustainable agricultural practices. These will have a direct impact in guiding the overall direction of production-related strategy recommendations.

Some of the resources were found through a Calgary Public Library WebPac key words search which was conducted on the following: sustainable agriculture; agriculture. Additional

articles were chosen from a Canadian Periodical Index (January/1998 to September/1999) key words search which was conducted on the following: sustainable agriculture; agriculture; beef production.

*Organic Agriculture*

PDWR's business philosophy – as described in its mission statement – revolves around a fundamental aim of producing beef raised according to organic certification standards. Thus, in order to develop final recommendations for the company, it is essential to understand the organic industry -- its practices, the demand for products, and the competitive environment. It is especially important to identify and predict major developments and trends in this industry, and to develop strategies with these factors in mind, thus enhancing the company's ability to retain control over its own economic destiny.

In addition, the literature review for this topic must include review of certification standards. Differences in public recognition and acceptance of standards may entail production- and/or marketing-related strategic implications. The Canadian Organic Advisory Board (website: www.coab.ca, 1999) and the Organic Crop Improvement Association certification guidebook (1997) were valuable sources of information on specific certification requirements.

The choice of certification standard may also require considerations of labelling. Certainly, labelling has a major impact on consumer decision-making. Life Cycle Management and Trade (OECD, 1994) and "The Natural Foods Market: A National Survey of Strategies for Growth" (Richman, 1999) included useful insights on the importance of labelling and unique considerations in environment-related product labelling strategies.

The nature of consumer demand for organic products is particularly important in developing final recommendations for the company. Findings in this area will provide the justification and guidance in pursuing growth management strategies. Data was collected from a variety of sources, however the primary resources for this sub-topic included the Canadian Organic Advisory Board (website: www.coab.ca, 1999), the Organic Trade Association (website: www.ota.com, 1999), and Agricultural Outlook (published by the United States Department of Agriculture). COAB and OTA are comprised of professional industry representatives and producers, and their mandates similarly aim to promote awareness of and trade in the organic industry, and to provide guidance in development of organic industry policy and standards at the national government level. Finally, various current newspaper and magazine articles provided further anecdotal evidence that the organic industry currently enjoys growing awareness in the public consciousness.

Some of the resources were found using a Calgary Public Library WebPac key words search which was conducted on the following: organic agriculture; organic food; organic beef; organic livestock. Additional articles were chosen from a Canadian Periodical Index (January/1998 to February/2000) key words search which was conducted on the following: organic agriculture; organic food; organic beef; organic livestock.

*Product Marketing*

Product marketing in general is a vast subject with many published resources readily available at libraries and bookstores. In order to develop final recommendations, a literature review of selected sub-topics was conducted. One of the aims of the review was to identify successful strategies which PDWR could adopt to enhance its own marketing effort. Since PDWR beef is a consumer product, two particular areas of consumer marketing merited review:

brand loyalty and customer service. In an effort to develop a unique image for PDWR products, branding is an attractive strategy that may assist PDWR to build a loyal customer base. In particular, Managing Brand Equity: Capitalizing on the Value of a Brand Name (Aaker, 1991) is an excellent primer with case studies on how to develop a successful branding strategy.

Closely related to developing brand loyalty is the strategy of developing customer loyalty through outstanding customer service programs. Building a loyal customer base is key to enhancing stability of long term sales, thereby allowing PDWR the flexibility to make strategic decisions based on reliable sales projections. To this end, Customer Bonding: Pathway to Lasting Customer Loyalty (Cross, 1995), Customer Loyalty: How to Earn It, How to Keep It (Griffin, 1995), and Service, Service, Service: The Growing Business' Secret Weapon (Albrecht, 1994) provided useful case studies and "how-to" strategies to deliver high quality customer service.

In order to identify and act upon new opportunities in the immature organic market, a literature review was conducted to collect general information on new product development and on developing industry-related business alliances. This review was helpful in brainstorming ideas for the final recommendations in this MDP. In particular, How to Bring a Product to Market for Less Than $5000 (Debelak, 1992), World Class New Product Development: Benchmarking Best Practices of Agile Manufacturers (Dimanescu & Dwenger, 1996), and Winning at New Products: Accelerating the Process from Idea to Launch (Cooper, 1993) were especially helpful in generating strategies with potentially synergistic benefits for PDWR.

A literature review of consumer demographic trends was conducted in order to identify potential target markets and explore new marketing opportunities. Identification of these trends was useful in developing final recommendations for marketing-related strategies. David Foot's

Boom, Bust, and Echo 2000 (1998) was a primary resource for understanding characteristics of and differences among the three demographic groups mentioned in his title. Less well known, but also informative were Menchin's The Mature Market: A Strategic Marketing Guide to America's Fastest Growing Population Segment (1989), and Ostroff's Successful Marketing to the 50+ Consumer: How to Capture One of the Biggest and Fastest Growing Markets in America (1989), although both are narrower in scope than Foot's work.

Finally, a growth strategy for PDWR would not be complete without an examination of international trade opportunities. In order to develop final recommendations, a literature review was conducted on "how-to" guides on international trade planning and logistics. Two publications in particular provide useful and appropriate advice from a Canadian business perspective: Exporting From Canada: A Practical Guide to Finding and Developing Export Markets for Your Product of Service (Curran & Kautz, 1994) and How to Succeed in Exporting and Doing Business Internationally (Sletten, 1994).

Some of the resources were found using a Calgary Public Library WebPac key words search which was conducted on the following: marketing; business strategy; product development; exporting; customer service.

*Business Life Cycle*

A business life cycle assessment of PDWR was carried out as part of Chapter 5: Organizational Analysis. Such assessment is required in order to identify where the company stands in the business life cycle curve, and to plan for growth accordingly. Albrecht's Service, Service, Service: The Growing Business' Secret Weapon (1994) provided the primary information for this analysis.

*Other Literature Resources*

Current articles in popular and reputable periodicals such as the Globe and Mail and The National Post were also reviewed in order to keep abreast of current events in the organic food and beef sectors. In particular, these publications have provided updates regarding ongoing international trade disputes and consumer attitudes to food issues such as genetically modified foods and pesticide/herbicide use in agriculture. These reports, though anecdotal and perhaps "un-scientific", nevertheless may reflect and/or sway the public mood regarding food safety issues. Either way, the influence of such publications plays no small part in affecting demand and perceptions of food in general and perhaps even organic foods in particular. It was therefore important to consult these publications in order to identify issues that may affect demand for PDWR products, and thus needed to be factored in for development of final recommendations for this MDP.

Key Informant Interviews

Most of the PDWR ranch families were interviewed to identify issues that may affect the company's ability to manage growth. In particular, interviews covered issues related to production practices, business administration, customer contact, and financial performance[1]. The following members were interviewed:

- MX Ranch: Charlie Straessle
- Freeman Ranch: James and Cas Freeman

---

1

In order to protect confidentiality of financial status of individual members and the company, questions were deliberately designed to inquire as to *level of satisfaction/dissatisfaction* of members with the financial results of selling organic beef through PDWR. No specific financial data will be disclosed in this MDP.

- Ketaorati Ranch: Norm and Hylah Simmons
- Stillridge Ranch: Keith and Bev Everts
- Frith Ranch: Larry and Jan Frith
- McRae Ranch: "Mac" and Peggy McRae
- Mt. Sentinel Ranch: Frances and Bonnie Gardner

Competitors and retailers in the organic foods industry were interviewed in order to compare marketing success of PDWR against local producers, and to establish a general sense of PDWR's profile in the local market. Direct competitors in the organic beef market, Colleen Biggs (co-owner, T.K. Ranch) and Keith Neu (President, Canadian Organic Livestock Association) were extremely generous in providing insights to their operations and future production and marketing plans. Rob Horricks (owner, Organic Express) and Victoria Adams (chef, River Café) also related their experiences in purchasing and marketing organic beef to their respective client bases. These interviews provided insights into marketing strategies and target market opportunities which were incorporated into final recommendations.

Lorne Fitch, biologist for Alberta Environmental Protection, was interviewed for his expertise in studying agricultural operations and its impact on natural resources, on-farm productivity, and health and safety implications for producers and the public. His input helped to highlight production-related opportunities that were incorporated into final recommendations.

Robert MacDonald, Executive Director of the Canadian Organic Advisory Board, was interviewed for his experience in coordinating development and implementation of the National Standard for Organic Agriculture. His input on certification processes and standards were instrumental in identifying certification- and marketing-related strategies in the final recommendations.

SWOT Analysis

With the exception of Chapters 1 and 2, each chapter includes a Strategic Considerations section which highlights the issues which are likely to affect PDWR's production, competitive, and trade environments. The Strengths, Weaknesses, Opportunities, and Threats [SWOT] analysis format is particularly useful in distinguishing internal issues (i.e., strengths and weaknesses which are specific to and controllable by the sector or entity) from external issues (i.e., opportunities and threats which originate from outside of, but which nevertheless have a direct or indirect influence on the sector or entity). SWOT analysis is an effective and efficient approach to strategy formulation because it addresses current problems which require solutions (i.e., weaknesses), assists in identifying leveraging opportunities based on company strengths, assists in developing programs to take advantage of external opportunities, and prompts development of risk management contingencies based on identified threats.

## CHAPTER 2: SUSTAINABLE DEVELOPMENT

Although "sustainable development" is a term which is much used by academics, industrialists, and environmentalists alike, there remains a significant degree of variance in the understanding and agreement on its definition. Indeed, what have been proposed to be defining statements of sustainable development may yet prove to be "dangerously vague" (Daly, 1996: 1). The concept of sustainable development has "numerous, wide-ranging, and often rather vague definitions" (Hirschhorn, et. al., 1991: 65), which have tended to be "statements of idealistic philosophy and morality rather than pragmatic plans for comprehensive action" (Hirschhorn, et. al., 1991: 64).

Further complicating attempts to arrive at a consensus view of the term "sustainable development" is the confusion over "sustainable growth", a term with which it is sometimes used interchangeably. In Daly's view, the two are separate and distinct; whereas "sustainable growth" represents an *adjustment* to conventional economic growth ideology, "sustainable development" represents an *alternative* to conventional economic growth ideology (Daly, 1996: 167).

Nevertheless, a review of recent literature on the subject indicates two major themes in the concept of sustainable development. First, development which is sustainable must accommodate the anticipated needs and welfare of future generations. Second, it must recognize the inherent interactions and consequences of human actions with and on the natural environment.

Perhaps the most famous definition of sustainable development which focuses on the first theme comes from the Brundtland report, entitled "Our Common Future", which sets it forward as development which seeks to "ensure that it meets the needs of the present without

compromising the ability of future generations to meet their own needs" (WCED, 1987: 8). The report further elaborates that sustainable development is "a process of change in which the exploitation of resources, the direction of investments, the orientation of technical development, and institutional change are made consistent with future as well as present needs" (WCED, 1987: 9). Since then, discussions of sustainable development have continued to focus on this theme (OECD, 1995: 18; Flattau, 1998: 136). More recently, local government departments such as Alberta Agriculture have also initiated programs to discuss "the future sustainability of agriculture" (AAFRD, 2000).

This theme of stewardship of the future is a philosophy of social responsibility which implies a set of basic needs for current and later generations which must be protected and even promoted. The Brundtland report emphasized this when it stated that the fundamental purpose of development is to "meet the basic needs of all and extend to all the opportunity to fulfill their aspirations for a better life" (WCED, 1987: 8). Similarly, Carley and Christie observe that "development is a process by which the members of a society increase their personal and institutional capacities to mobilize and manage resources to produce sustainable and justly distributed improvements in quality of life consistent with their own aspirations" (Carley, et. al., 1992: 41). Daly further suggests, "we should strive for sufficient per capita wealth – efficiently maintained and allocated, and equitably distributed – for the maximum number of people that can be sustained over time under these conditions" (Daly, 1996: 220).

The second theme of sustainable development refers to development which "must take place, and be maintained over time, within the limits set by ecology in the broadest sense – by the interrelationships of human beings and their works, the biosphere and the physical and chemical laws that govern it" (Hirschhorn, et. al., 1991: 64). A narrower and more specific definition asserts that sustainability is "renewable resource use that does not exceed the rate of

regeneration, non-renewable resource use that does not exceed the rate at which sustainable, renewable substitutes are developed, and pollution emissions that do not exceed the capacity of the environment to absorb them" (Flattau, 1998: 266). Daly's definition is perhaps most succinct: "development without growth – without growth in throughput beyond environmental regenerative and absorptive capacities" (Daly, 1996: 69).

This second theme reflects the concept of limits to development. It is a recognition that the ecosystem within which we operate is "finite, non-growing, and materially closed" (Daly, 1996: 1), and is an argument for quality of life versus quantity of possessions (Daly, 1996: 1; Flattau, 1998: 136). It implies that in planning for development, the need to "anticipate and prevent environmental damage requires that the ecological dimensions of policy be considered at the same time as economic, trade, energy, agricultural and other dimensions... on the same agendas and in the same national institutions" (WCED, 1987: 10).

Nattrass and Altomare (1999:23) also emphasized the "closed loop" processes which business must strive towards. Furthermore, the authors describe four system conditions of a sustainable development-oriented society:

- Nature's functions and diversity are not systematically subject to increasing concentrations of substances extracted from the Earth's crust;
- Nature's functions and diversity are not systematically subject to increasing concentrations of substances produced by society;
- Nature's functions and diversity are not systematically impoverished by over-harvesting or other forms of ecosystem manipulation; and,
- Resources are used fairly and efficiently in order to meet basic human needs worldwide.

Note that the first three points are consistent with the principle of finite resources and the acknowledgement of the closed system within which all development operates, and the fourth point is consistent with inter-generational considerations of resource usage. In order to achieve sustainable development, four key objectives should be met (Nattrass & Altomare, 1999: 15):

- Strive towards zero waste processes;
- Develop whole systems thinking;
- Develop a global thinking attitude which makes the world's problems the company's problems; and,
- Move the focus from individual environmental issues to overall sustainable development.

In spite of the confusion surrounding the definition of sustainable development, the overwhelming consensus is that sustainable development, in the broadest sense, is an unequivocal necessity for long term development planning and policy. Social inequity and ecological disasters have prompted governments, scientists, and citizens to re-think long-held assumptions that growth can continue unabated without consequences (Daly, 1996; Brown, 1998; Hirschhorn, et. al., 1991; Carley, et. al., 1992; Flattau, 1998; OECD, 1995). If nothing else, sustainable development is a highly abstract concept which only becomes more concrete as it is demonstrated through specific economic and social activities.

## CHAPTER 3: SUSTAINABLE AGRICULTURE

### Definition

Within the larger sphere of sustainable development lies the specialized concept of sustainable agriculture. It is important to note that "sustainable agriculture" is a relatively new philosophy which encompasses much more than simply specific production practices. Indeed, one can successfully argue that "traditional" practices (such as crop and pasture rotations, windbreaks, natural composting, etc.) have been and are still around since the dawn of agriculture, and that these may be deemed to be "sustainable". But this is a misleading argument which ignores two issues which proponents of sustainable agricultural seek to address.

First, sustainable agriculture is a *conscious effort* to develop alternative production practices which have (or are believed to have) fewer environmental impacts than conventional agriculture, and which are based on the scientific method, including observation, hypothesis, and proof of concept. Traditional practices do not necessarily enjoy this distinction. Second, a fundamental principle in developing sustainable production processes is to address the *long-term impacts* on related systems *beyond the farm unit.* Again, it cannot be argued that either traditional or conventional (i.e., modern-day, chemical-intensive, typically First World) practices were developed with this principle in mind. Thus is sustainable agriculture distinguished from both traditional and conventional methods of agriculture.

In keeping with the larger umbrella of sustainable development themes, sustainable agriculture seeks to "produce adequate supplies of food, conserve natural resources, protect the environment and the health and safety of citizenry, and otherwise meet the requirements of economic and social acceptability" (Schaller, 1993). In order to achieve this, producers must

view the farm as "an integrated system made up of elements like soil, plants, insects, and animals", and to "reduce or eliminate traditional inputs such as pesticides and fertilizers" (Brower, et. al., 1999: 97). This is in contrast to industrial/conventional agriculture which "looks at the farm as an outdoor factory, with inputs entering one end and outputs exiting the other" (Brower, et. al., 1999: 97).

From a more narrow perspective of pollution prevention, Hirschhorn and Oldenburg support a concept of sustainable agriculture whose objective is to "eliminate or reduce the use of chemicals that have been proven to become harmful environmental wastes at the production site (farm), in the products (foods), and at the original chemical manufacturing facility", and which includes "preventive health care for livestock in order to reduce the widespread, intensive use of antibiotics, which become a waste residue in foods and threaten human health" (Hirschhorn, et. al., 1991: 185). Similarly, a "closed-system" approach to sustainable agriculture would seek to mimic the processes of natural systems, mostly by minimizing inputs to and outputs from the landscape (Fitch, 1998).

From yet another perspective, the Natural Step program is a system which guides business in building a framework to integrate environmental responsibility into production processes and move towards achieving sustainable development (Nattrass & Altomare, 1999). In applying the four key processes identified earlier, sustainable agriculture could progress towards zero waste by eliminating overuse of artificially-produced chemicals such as pesticides and herbicides, minimizing watershed contamination from production processes (chemical runoff, livestock waste, etc), and reducing air pollution from machinery exhaust. Whole systems thinking would involve integrity of landscape ecology. Adopting a global thinking perspective would entail considerations of the impact of operations on neighbours and of products on consumers. It may also require producers to acknowledge and accommodate the impact of global

events (such as the greenhouse effect and depletion of the ozone layer) on the quality of on-farm resources.

Each of these definitions is harmonious with either or both major themes of sustainable development, i.e., stewardship of future generations and the impact of development on environmental capital. Under sustainable agriculture, the primary stakeholders/participants are producers/farmers and consumers. Major natural resources of interest include soil, water, habitat/landscapes, and livestock.

Interest and promotion of sustainable agricultural practices has been growing due to a history of unsustainable conventional agricultural practices which have led to degradation of the resource base, including soil loss, soil nutrient depletion, dropping water tables, excess sedimentation, and desertification (WCED, 1987: 125-128; Brown, 1998; OECD, 1995: 62-74). These problems have led to loss of farmland and prompted concerns over food security (WCED, 1987: 129; Brown, 1998: Chapter 4). In addition, consumers and producers alike are becoming alarmed over proven and potential human health problems caused by overuse of pesticides, antibiotics in livestock, water contamination, and artificial supplements and hormones fed to livestock (Sternberg, 1999; Hirschhorn, et. al., 1991: 167-169; Welsh, 1999). Additionally, Greenfield notes that there is a growing concern in the agricultural sector over the public's perception of farm practices (Greenfield, 1997: 23-29). Consumers are becoming increasingly aware of how agricultural practices affect their own personal health and safety, especially in terms of product quality, shared resources, and environmental impact.

**Benefits**

To date, it is fair to say that sustainable agriculture is more of a production philosophy

rather than a proven science. There are few systems which exist that measure the "sustainability" of a farmer's production practices. Although there are a few specific government programs which seek to encourage sustainable (sometimes referred to as "alternative") agriculture, these programs tend to be narrow in scope, rather than a holistic attempt at sustainable agriculture (Greenfield, 1997). Nevertheless, in Canada there has been some progress in audit systems which measure the extent of sustainable agricultural practices on an individual farm basis.

Part of the problem in measuring "sustainability" is that ecosystem management often focuses on changes in ecosystems over the very long term, and thus cannot be measured meaningfully in the short term. A long-term commitment to experimenting with sustainable agricultural practices is key to assessing the success of those practices.

For example, according to some experts, crop agriculture, even if deemed to be "sustainable", is considered to be incompatible with natural systems, because there are just too many inputs, outflows, and alterations to the landscape to come anywhere near to approximating the natural systems that existed before the crops were introduced. Cattle and some other livestock production, on the other hand, offer more promise, especially during the summer months, when there are minimal inputs to the landscape (Fitch, 1998). Still, there are concerns that the timing of cattle grazing can upset the natural cycles of the landscape. The key to landscape management is to use the landscape resources according to its role which evolved over millennia (Fitch, 1998). For example, cattle grazing on rough fescue in southern Alberta during the spring would be inappropriate because bison were historically winter grazers. Consequently, rough fescue has evolved to withstand late season grazing, but is less capable of recovering from spring grazing (Fitch, 1998). However, there is widespread agreement that there has not been enough time to say one way or another if sustainable beef production processes can closely mimic the natural systems of that landscape.

Nevertheless, the benefits of sustainable beef production are predicted to include better productivity of soil, improved water and air quality, stability of microclimates, and more diversity of landscape flora and fauna (Fitch, 1998). Based on studies done by Alberta Environmental Protection, riparian systems which were managed according to proper understanding of the landscape's functions yielded positive effects on water quality and quantity, and helped to sustain forage levels (Fitch, 1998). Furthermore, it is estimated that a healthy riparian system will buffer ranchers from natural climatic variations such as floods and – especially in southern Alberta – drought. If riparian systems are managed properly, forage capability will be more stable. Thus, during times of drought, ranchers may need to cut back less on herd size, or not cut back at all (Fitch, 1998).

Similarly, from a wildlife perspective, predictions by experts suggest that properly managed landscapes will encourage more diversity of wildlife, and their use of habitat (Fitch, 1998). Better diversity will contribute to increased stability in the ecosystem, which acts as a natural buffer during environmental and climatic variations such as fire, flood, and drought (Fitch, 1998).

**Measurement**

The key to measuring the success of sustainable development practices is to develop a comprehensive and ongoing monitoring program (Fitch, 1998). In order to evaluate sustainability of a farm operation, producers may turn to environmental audits as a tool for measurement. Greenfield, in her analysis of environmental farm auditing, defines environmental audits as "evaluative tools that employ a systematic, objective and documented process to ascertain how well an organization performs relative to specified environmental performance

standards" (Greenfield, 1997: 3). She further elaborates that environmental audits must provide specific information on an individual's operations and must adhere to a credible and technically accurate process.

Greenfield notes that a comprehensive farm audit should have the following objectives (Greenfield, 1997:82):

- Identify potential compliance problems;
- Provide for the evaluation of the agricultural operation against relevant conformance standards;
- Identify deficiencies in farm environmental management systems;
- Identify practices that adversely affect the public's perception of safety and health of farm products;
- Identify practices that make inefficient use of natural resources;
- Provide direction in correcting environmental problems.

In addition to fulfilling the above objectives, Greenfield found that the ideal farm environmental audit should be proactive, comprehensive, periodic, provide reliable audit protocols, have high producer involvement, includes meetings between the farmer and audit team representatives, provides action plans for the farmer, and incorporates a monitoring function

Not surprisingly, site-specific differences in farm operations complicate the process of measuring the impact of agricultural operations, especially given the interdependence of soil, water, and air (Greenfield, 1997:29).

Nevertheless, Greenfield's discussion showed that measurement of sustainability is not

only possible, but her analysis concluded with a recommendation of a current audit system -- the Ontario Farm Plan -- which she found to be a good working model. In particular, she noted that access to experts and a more detailed and comprehensive protocol distinguished it from other existing audit systems (Greenfield, 1997: 144).

From the producer's perspective, the incentives to put these measures and practices in place -- beyond those identified earlier -- must be both beneficial for production, and, more importantly, economically feasible. According to agricultural experts, there are many strong economic and productivity-related reasons for maintaining landscapes in a sustainable manner (Thierren, 1996: 29). For example, if rough fescue is properly maintained earlier in the year, then it can be grazed as a natural and low-cost forage into the winter, thus saving money on the purchase of hay and other feed from outside suppliers (Fitch, 1998). Another example is that if riparian areas are not properly maintained, then a flood or heavy rains can drastically move waterways along flood plains, thus affecting prime grazing land, perhaps even to the point of losing it altogether (Fitch, 1998). Thierren identified problems such as loss of soil fertility, quality and quantity of water supply, pests, soil depletion, loss of natural habitat, and the overuse of agricultural chemicals as problems of particular concern in southern Alberta (Thierren, 1996: 33-35).

Studies and demonstration sites, such as at the Antelope Creek, Alberta site, are starting to help ranchers to see the long-term beneficial effect of sustainable landscape management practices (Fitch, 1998). However, it is clear that the natural habitat that they are using as a resource is a result of thousands of years of evolution, which included major forces such as fire and the buffalo. Practices which seek to mimic the landscape's natural processes are the most appropriate to ensure stability and adaptability of the ecosystem, and will ensure a long-term, low-cost sustainable resource (Fitch, 1998).

Environmental audits are particularly useful in identifying environmental risk, and the economic risks associated with environmental degradation. For example, excess usage of manure in crop production may cause water contamination from run-off. Economic penalties levied against the farmer could include legal/regulatory penalties, legally mandated clean-up costs, economic losses due to legally-mandated shut-downs, civil liability, loss of bank financing, loss of sales/marketability, and productivity/profitability loss due to poor environmental practices (Greenfield, 1997).

**Consumer Demand**

Another potential incentive for ranchers to pursue sustainable agricultural practices is if consumers demonstrated an interest in buying products which contribute to sustainable use of resources. For the long term, marketing one's beef as promoting sustainable development could be a valuable opportunity to differentiate the product, not only from conventional beef products, but also from organic-certified beef products. Indeed, by promoting their sustainable practices, and how these practices in the rural environment affect urban residents, may be a unique and profitable approach to product positioning and differentiation. It should be noted, however, that producers must ensure that their claims can be supported by science and observation. As with any campaign which seeks to persuade consumers and/or the public, false, misleading, or exaggerated claims are ultimately detrimental to the cause, even ones with the best of intentions.

For example, an important link between rural and urban populations is the system of waterways which is a shared resource. Presumably, both parties also share a common concern for quality and quantity of water resources. Like ranchers, urban consumers also need to be informed on how sustainable agricultural practices can be beneficial on ecological and economic

fronts. If consumers can be educated to acknowledge and recognize how the practices of one affect the other, then there may be an incentive to shift wealth (in the form of sales transactions) from urban consumers to sustainable ranchers. For example, if rural practices contaminate urban drinking water, then the traditional solution has been to spend money on expensive treatment plants. But another alternative could be for consumers/urban centres to encourage sustainable practices which prevent contamination of waterways by buying products and supporting groups which are involved in sustainable agricultural practices. Unlike the treatment plant solution, which tries to fix the problem after the fact, the consumer-driven approach is a pro-active, "carrot" strategy which rewards problem-avoidance behaviour.

A real-life example of this kind of consumer advocacy is the movement to promote "Fair Trade" coffee. Large coffeehouses such as Starbucks and Second Cup have been persuaded by consumers and non-governmental organizations to purchase coffee beans from small-scale growers and grower co-ops, even though their prices per pound are higher than from regional brokers (Hornblower, 2000; van den Broek, 1999). The pressure to buy Fair Trade coffee came in the form of demonstrations, boycotts, and individual consumers requesting that the chains purchase from these growers. Admittedly, the central issue of Fair Trade coffee was to provide better prices for the coffee growers who previously had little or no choice in to whom and at what price they would sell their beans. Nevertheless, this is an example of consumers voting with their pocketbook to favour certain products over others, using criteria which are not only based on cost and quality, but also a philosophic sense of fairness in economic trade. Therefore, it is not unreasonable to expect that the same may be possible in promoting products which may contribute to a healthier environment.

The challenge of this approach is to educate customers on the benefits of sustainable practices, and how to evaluate products for their "sustainability" level. This can be accomplished

in a process similar to organic certification, a kind of "sustainable development certification". For example, there is a current model standard called "Public Lands Range Assessments" that could be used as a style guide for a commercially-oriented landscape management plan (Fitch, 1998). Alternatively, the Ontario Farm Plan which Greenfield recommended may be another candidate that can be used as a guide.

Interestingly, although Greenfield argued that consumers play a significant role in the drive to adopt farm environmental audits, her analysis of the ideal audit process did not include a need for public awareness and acceptance of the process. The problem with current environmental audit systems is that no matter how technically excellent the process may be, if the public is not aware of the process, and is not aware of how the process contributes to a high quality, environmentally sustainable product, then consumers cannot reliably incorporate environmental sustainability into their purchasing decision.

Although sustainable practices are becoming more important to consumers, there are two major deficiencies in trying to connect environmentally sustainable products to environmentally conscious consumers. First, consumers have little or no awareness of the various farm environmental audits systems, including the pros and cons of each system. Secondly, and perhaps more importantly, there is no labelling system for products which meet environmental audit requirements. In contrast, organically certified products enjoy the benefits of labelling and promotion to consumers from the sponsoring agency (see "Chapter 4: Organic Agriculture").

Although individual producers and producer groups may seek to undertake this promotional role, it is an expensive, resource-intensive mission. Instead, it is more suited to a producer organization with deep pockets and more highly focussed skills and resources. Organizations such as the Beef Information Centre, the Dairy Bureau of Canada, and the

provincial Wheat Boards are role models which have successfully taken on these responsibilities. Sustainable agricultural producers have yet to develop a similar organization with the financial and human capital to do this. In a time of scarce government funding, it may be necessary for producers to independently form their own national or regional marketing organizations. This approach can help with developing a national market (Canadians are generally not aware of sustainable agricultural foods), and a marketing group can also facilitate international trade.

**Strategic Considerations**

Based on the previous discussion in this chapter, the strategic issues which face the sustainable agriculture industry can be summarized as follows:

Strengths

- Production management on a sustainable basis should yield a high productivity operation with low input costs for the long term. Producers who practice sustainable agriculture should be able to maximize economic efficiency and enjoy high productivity.
- Beef production in southern Alberta lends itself particularly well to sustainable development practices which seek to mimic natural processes. Ranchers have an opportunity to capitalize on this by enhancing their production practices accordingly.
- There is a small but growing consumer awareness of the links between rural agricultural operations and health and well being of urban consumers/dwellers. Food products may gain more attractiveness to consumers if the sustainable development feature is marketed appropriately.

Weaknesses

- Economic, social, and production benefits of sustainable agricultural practices are neither well known nor proven. Therefore, a marketing approach which seeks to promote sustainable agricultural practices must be carefully designed to educate the consumer about production practices, without making unrealistic or unproven claims about how these practices affect the environment and/or human health.
- There are only a few comprehensive auditing systems for sustainable agriculture development. Furthermore, these programs are not well known by consumers – or even farmers. Instead, these programs tend to focus on helping the producer to measure on-

farm sustainability, with little or no emphasis on how this may be translated to marketing product. As a result, marketing support from program sponsors is weak.

## CHAPTER 4: ORGANIC AGRICULTURE

### Definition

Organic agriculture is "part of a larger movement toward environmentally sustainable agriculture" (Brower, et. al, 1999: 97). Unlike audit systems for sustainable agricultural practices which are primarily concerned with measuring ecosystem and resource integrity[1], organic farmers tend to focus more on production processes which contribute to end-product characteristics. Although larger ecosystem issues such as water quality, waste management, and soil management are addressed, the overall aim of organic agriculture is to deliver products for customers who want to buy food produced with few or no artificial inputs.

Although organic agriculture is a phenomenon which is driven by the same concerns as sustainable agriculture, and it aims ostensibly towards the same goals as sustainable agriculture, in its real-world, practical application, organic agriculture is less ambitious; it is more limited and narrower in scope, and thus falls short of achieving true sustainable agriculture. This is what currently sets organic agriculture apart from sustainable agriculture. It is possible that eventually, organic agriculture *practice* may catch up to its *principle* (which admittedly echoes many of the same principles of sustainable agriculture), especially if organic audit processes incorporate the same measuring instruments as sustainable agriculture audit processes. At that point, organic agriculture may be considered to be synonymous with sustainable agriculture, but until then it is important to note this distinction between the two philosophies.

---

1

"Integrity" of landscape, ecosystem, or resources refers to the extent that a system mimics its natural cycles with minimal inputs to and outflows from the system.

For example, in his analysis of organic certification processes, Thierren determined that the Organic Crop Improvement Association's (OCIA) certification process did not fully address all environmental issues related to farm management (see "Table 1: Regional issues and concerns addressed by the organic certification process"). He further noted that although the most important components of environmental accountability (protection against soil erosion, soil fertility, and water availability, use, and conservation) are covered under the OCIA audit process, other issues such as maintenance of biodiversity and environmental stewardship are *not* adequately addressed (Thierren, 1996: 103). In these cases, if the farmer does not follow up on recommendations from the audit report to address such issues, "no negative consequences are likely to result, i.e., certification would not be denied based on such factors" (Thierren, 1996: 103).

Another distinction is the treatment of potential agricultural chemical contamination. Thierren notes that identifying potential contamination, although a part of the OCIA inspection process, is accorded a "different emphasis than an environmental audit of a farm might have" (Thierren, 1996: 103), and that the concern is primarily one of contamination of product, rather than on the health risk, plant damage, or environmental liabilities resulting from improper use (Thierren, 1996: 103).

Despite the apparent shortcomings of the organic certification process to address all aspects of agricultural/environmental sustainability, it is nevertheless important to remember that certification processes such as the OCIA's incorporate a "continuous improvement" component, which allows flexibility of farmers and the sponsoring agency to stretch current boundaries of minimum certification requirements. Indeed, Thierren noted that besides requiring auditors to provide tips and recommendations to enhance organic practices, organizations such as the OCIA also actively encourage their farmer members to contribute advice for all members (Thierren,

1996: 104). In essence, this strategy helps to "raise the bar" of organic production processes. This evolution of organic practices may enable organic farmers to easily upgrade to more robust sustainable agriculture audit processes.

Table 1: Regional issues and concerns addressed by the organic certification process.

| **Regional Issues** | **Coverage of issues in the organic certification process** |
|---|---|
| Water loss, misuse | Partial |
| Moisture limitation | Yes |
| Soil Erosion | Yes |
| Soil quality loss and fertility | Yes |
| Contamination<br>• Agricultural chemicals<br>• Storage tanks and dumpsites<br>• Manure and waste disposal | Partial |
| Range and riparian management | Partial |
| Biodiversity and wetlands | Partial |
| Pest and weed control | Yes |
| Animal care and health | Yes |
| Litter, nuisance, proximity of facilities | Partial |
| Management system<br>• Monitoring farm data<br>• Use of external knowledge<br>• Information system<br>• Planning abilities | Partial |

Source: Thierren, 1996.

There is a major distinction that should be made between organic products, which are certified, and those which are not. "Certified organic" agriculture is a specialized form of organic agriculture and is distinguished by a production process which seeks to "assure that organic produce meets clear production standards" (Brower, et. al, 1999: 97). Typically, producers who conform to certifiable organic standards are monitored through a periodic, third-party certification audit protocol, and those who meet the standard are given certified status for their products (similar in concept to receiving a "Canada Grade A" designation for fresh meat products). Certified organic producers are then awarded the privilege of advertising their products with an "Organic" seal of approval specific to the sponsoring agency which administers the certification standards.

Alternatively, there are producers who are not certified according to any known standard but who offer products, which are grown using organic principles. They often refer to their processes as organic, and sometimes advertise their products as "organic" or "natural". However, these producers also offer little or no supporting documentation that their products are any different from conventionally-grown products. In addition, the concept of "organic production" may vary among non-certified producers. At best, unknowing customers may be purchasing foods which truly conform to the spirit of organic and sustainable production methods. At worst, they may be buying products from unscrupulous, non-organic producers who use misleading advertising in order to profit from a growing consumer trend.

This confusion over certified and non-certified organic agriculture has problematic implications for marketing to consumers. However, these issues will be set aside for the purposes of this MDP, and the focus will be on certified organic agriculture. Not only is this a pragmatic approach for discussion purposes, but it is also a recognition that recent changes in the organic agriculture industry indicate that producers will find it increasingly difficult to co-opt the

term "organic" for non-certified products. These changes will be discussed later in this section. Therefore, for the remainder of this thesis, "organic agriculture" refers to agricultural methods which conform to third-party certification standards.

**Benefits**

Like sustainable agriculture, the environmental benefit of organic agriculture is difficult to quantify, since benefits are "hard to define and reliable data are scarce" (Brower, et. al, 1999: 97). It will likely require many long-term studies to determine if organic agriculture practices will yield any measurable advantages over conventional practices. It should also be noted that the study of organic agriculture is fraught with political and economic ramifications, especially when comparisons are made with conventional agriculture. Proponents and practitioners in the organic agriculture industry face issues which are similar to those which face proponents and practitioners of so-called "alternative medicine" (i.e., acupuncture, herbal remedy, homeopathy, reflexology, etc.). Both groups advocate un-conventional approaches which threaten to undermine the influence of established commercial and professional interests (albeit alternative therapists concede that their practices should be viewed as complementary to conventional medicine, and not necessarily as a replacement for it). Furthermore, funding to conduct comparative studies is not readily available, since there are few, if any, large commercial entities which stand to benefit from such research. And even when funding is found for studies, it may be perceived that such studies are biased according to the research group and/or the funding source. However, the same could be said for studies of commercial products if the funding source is the company which manufactures the products. Indeed the recent case of Dr. Nancy Olivieri has highlighted the potential conflict of interest inherent in commercially-related funding (Jimenez, 2000; Seeman, 2000).

With these caveats in mind, some experts suggest that organic agricultural practices should reduce water pollution, soil erosion, air pollution, excess water usage, and increase yields during times of environmental stress, such as drought and flooding (Brower, et. al, 1999: 97). Indeed, although organic agriculture is a relatively new practice, recent case studies have demonstrated superior crop yield performance of organic versus conventional production during periods of drought in the U.S. (Global Report, 1999; Welsh, 1999). Researchers credited improved soil quality for the success of organic agriculture (Global Report, 1999; Welsh, 1999).

The low-input philosophy of organic agriculture is often perceived to imply higher variable costs of production due to expensive substitute processes, the need for more manual intervention, and lower yields. However, experts suggest that profitability of organic crop agriculture can actually be higher, and point to cases where production costs are lower than for conventional production, yields are higher, and crops more drought-hardy (Welsh, 1999). Indeed, the success of such cases seems to have prompted governments in the U.S. and Europe to offer incentive programs for conventional producers to switch to organic practices (Welsh, 1999).

In contrast to non-audited sustainable agriculture, the major benefits for producers of organic agriculture are: mandatory, periodic performance monitoring and review; product labelling; and marketing support from sponsoring agencies.

It is particularly important to note that there are no definitive studies which suggest that eating organic foods is healthier for consumers. In contrast, however, there are conflicting reports, which suggest that conventionally produced foods may contribute to certain illnesses and diseases (Cooper et. al., 1999). It is this uncertainty that drives the perception that organic foods may be a safer alternative to conventionally produced foods (Garcia, 1999; Shaw, et. al., 1999;

Hardell and Eriksson, 1999; Economist, 2000).

**Measurement**

Monitoring performance and processes is the key element of organic certification. The importance of periodic measurement against a consistent standard has already been outlined in the discussion on sustainable agriculture audit programs, and is equally applicable to organic agriculture programs. Certification standards can be categorized as government- or non-government-endorsed programs. Canada's National Standard for Organic Agriculture (CAN/CGSB-32.310), the British Columbia Certified Organic Production Operation Policies and Farm Management Standards, and the U.S.'s forthcoming national organic standard are all examples of state-sponsored standards which aim to provide regionally- or nationally-recognized standards for organic agricultural production. Organic producers who fall within these jurisdictions are eligible to be audited and certified according to these standards. In contrast, non-government groups such as the California Certified Organic Farmers Organization [CCOF], the Organic Crop Improvement Association [OCIA], and Canadian Organic Crop Certification Program administer their certification programs on a membership basis. In Canada, there are over 50 non-government certification programs.

As organic foods in general gain popularity and attention (see "Demand" section of this chapter), there will be increasing demand from consumers and consumer groups for a mechanism to sort through the many different organic production standards. Consumers Union, the non-profit organization which publishes "Consumer Reports" magazine, has already recognized this need and has announced a new project to "develop a database of environmental labels which will include the evidence or verification that exists for their claims and the parties behind the certification" (Consumer Reports, 2000). However, since Consumers Union is an American-

based organization, it may be unrealistic to expect a thorough examination and inclusion of Canadian organic standards in their final database product. Although the Canadian Organic Advisory Board has recognized the need for a comprehensive comparison of Canadian standards, there are no resources currently assigned to undertake this endeavour (MacDonald, 1999).

Indeed, one of the dangers of popularization of organic foods is the "bandwagon effect". PDWR members noted that they have already encountered suppliers and other producers who have joined the organic industry because they are attracted to the growing market and better profit margins, and not necessarily because they are committed to the organic philosophy. For example, some members noted that certain suppliers were not very knowledgeable about the organic products that they were selling, and sometimes promised unrealistic results. Immature industries are particularly susceptible to permanently losing potential customers as a result of unscrupulous practices by producers, processors, or retailers. Thus, educational efforts such as those by Consumers' Union to inform consumers on organic certification systems may help to discourage unethical self-proclaimed organic producers and marketers.

Two certification programs – the Canadian national standard and the OCIA program – are particularly worth examining. The first is significant because it is the only national organic standard in the world and its sponsors specifically developed it to aid in international trade of Canadian organic products. This makes it of strategic significance for PDWR's case analysis which follows. The OCIA standard is worth discussing because it is the current standard which PDWR uses for organic certification, and therefore would be a useful subject for comparison with the new Canadian national standard.

**National Standard of Canada for Organic Agriculture**

On April 20, 1999, after ten years of collaboration between government agencies and organic groups, the Standards Council of Canada ratified a set of standards for organic food production. The National Standard of Canada for Organic Agriculture (CAN/CGSB-32.310) was approved in a vote by members of the Canadian Organic Advisory Board[1] [COAB] in February 1999. The Canadian Standards Council endorsed the standard in April, and the complete standards document was published in June 1999. The new standard is similar to current standards of existing organizations such as the OCIA. Indeed, its creators deliberately developed the standard to harmonize with most existing organic standards in Canada. The new standard continues to focus on production processes which primarily affect the characteristics and quality of the final product, and secondarily on long-term sustainable agricultural development. This is not surprising, since from a consumer point of view the organic feature will most directly affect the perceived healthiness and quality of the product. This is one of, if not the most important purchasing criteria for most consumers of organic foods (Welsh, 1999; Ames, 1999).

The establishment of the national standard makes Canada the first country to have a national standard for organic food production. The standard is based on the principle that organic products must be produced according to "ecologically sound production and management practices to enhance the quality and sustainability of the environment and to ensure the ethical treatment of livestock" (COAB, 1999). Accordingly, the standard's aim is to specify "minimum criteria that must be met when food products, inputs, and other products used in organic production are defined as organic, or by comparable wording as described in the

---

1

Please refer to "Industry Groups" section of Chapter 6: Competition / Product Marketing Analysis for discussion of COAB.

standard"(COAB, 1999). The scope of the standards document includes the following (COAB, 1999):

- Conversion period to organic agriculture.
- Production plans and records.
- Crop and livestock production.
- Maple production.
- Honey, greenhouse crops, mushrooms, sprouts, wild/natural products.
- Production and processing.
- Packaging, labelling, storage, distribution.
- Permitted substances list.
- Restricted substances list (includes genetically modified organisms, irradiated foods, and sewage sludge).

COAB and its members expect that the establishment of the Canadian National Organic Standard will be a significant boost to consumers and the organic industry in three ways.

First, it is expected that consumers will more readily accept an organic standard which is endorsed by reputable and well-known government agencies such as the Canadian Standards Association, Standards Council of Canada, Agriculture Canada, the Canadian Food Inspection Agency, and the Canadian General Standards Board. This blue-chip support from high profile and powerful agencies, although not a guarantee of success, is a potent driver for consumer acceptance. Furthermore, these sponsors may be able to offer significant financial support in promoting awareness and educating consumers on the benefits and significance of products which are certified against the new standard. This may include promotion through conventional media, in addition to publicity campaigns, brochures, mailouts, studies, Internet promotions, etc.

In addition to producers, specialty retailers of organic products expect to benefit from promotion of the standard, especially if it helps to raise awareness of organic practices, and provides clear labelling and standardization of organic products (Horricks, 2000).

This level of endorsement and support is in direct contrast to certification by one of the assortment of non-government organizations such as the OCIA. It is highly unlikely that the typical Canadian shopper – even one who often shops for organic products – is familiar with any of these organic standards. Although consumers may be equally ignorant of the standards behind the "Canada Organic" label, at least there is the strength of government endorsement supporting it.

Second, the national standard offers consumers a consistent, "no surprises" criteria for organic products from coast to coast (COAB, 1999). The appeal of products that meet a consistent standard is a particularly time-tested, successful strategy in product marketing. From the cut of McDonald's french fries, to the grading of maple syrup, consumers insist on products which can offer a reliable, consistent quality that meets their expectations (Sheehy, et. al., 1996; Shim & Siegel, 1999; Morgan, 1999; Crainer, 1998; Crainer, 1999). Product loyalty is built upon meeting these requirements, no matter where the consumer shops, whether at a farmer's market outside Kelowna, or at a Superstore in downtown Toronto. A national standard applied to organic products is a significant step in assuring the customer that, for example, Alberta beef which has been certified organic according to the national standard was produced using the same organic production principles as nationally-certified organic beef produced in Nova Scotia.

Third, the national standard has been specifically developed with an eye to export markets, especially Europe and Asia (COAB, 1999). The standard will be ratified under the auspices of the ISO standards development process. Indeed, the intention of COAB and other

participants in the standards and certification process is to continue to ensure that the standard, and the certification system in particular, are compliant with ISO requirements for auditing and certification processes (COAB, 1999). The goal is to provide producers with the ability to use the certification as a lever to move into international markets. Specifically, Europe is the dominant international market for organic products, but European Union product labelling requirements and restrictions on genetically modified foods and hormone-treated beef have been a significant obstacle for Canadian producers (Globe and Mail, 1999). National Organic Standard Certification, under the auspices of ISO audit standards compliance, is expected to facilitate easier access to European markets.

The most important success factor of the new national standard, however, is that it must be acceptable to producers, consumers, and authorities in importing countries. The standards must agree to a strong and widely held notion of what constitutes organic food. In the U.S., for example, the government's initial draft set of regulations for organic food production, which includes beef cattle, was extremely controversial and had been subject to heavy criticism from the organic industry (Cummins and Lilliston, 1999). Specifically, the stricter "organic" producers accused the government of watering down the meaning of organic food to include "natural" foods, which would still allow for antibiotics use and other inputs that are not considered to be organic. Critics argued that the standards were too diluted, ambiguous, and in some cases directly contravened widely held definitions of organic such as the OCIA standard (Cummins and Lilliston, 1999). Much of the controversy was attributed to the allowance of what is sometimes called "natural" beef (does not restrict inputs as much as organic beef), genetically modified organisms [GMO's], and irradiated foods.

In contrast to the U.S. efforts, the Canadian national standard categorically forbids GMO's, irradiated foods, and the use of sewage sludge as fertilizer (COAB, 1999). Furthermore,

the Canadian standard specifies minimum criteria that must be met when food products, inputs, and other products used in organic production are defined as organic by enforcing "an integrated agricultural production and management system that abstains from using synthetically-compounded fertilizers, pesticides, growth regulators, and livestock feed additives such as antibiotics" (COAB, 1999) and which helps to "promote and maintain soil productivity and tilth, and biological techniques designed to manage pests and promote diversity" (COAB, 1999). In addition to these stated principles, the standard is expected to "have a significant and productive role to play in reducing the use of synthetic pesticides, lowering rates of nitrate leaching, soil degradation, and greenhouse gas emission levels, while enhancing biodiversity and sustainability" (COAB, 1999). Presumably, agricultural practices which follow the national organic standard should contribute to the attainment of these aims in general, however it seems highly unlikely that there are any reliable systems which could, for example, measure greenhouse gas emission levels at a farm site.

**Organic Crop Improvement Association**

In contrast to the Canadian national standard, which was developed with full crop and livestock standards, the OCIA standards were initially developed for crop/grain agriculture only. Later, standards for livestock production were added, and the standards further branched off into other, more esoteric areas of agri-food production, such as sea products and honey production (OCIA, 1999).

OCIA standards are based on the following principles (OCIA, 1999):

- The organic certification system should allow consumers to identify and reward conscientious practices that preserve natural resources;

- Organic production should focus on management of natural processes and that inputs to a farm operation should seek to enhance, not replace, effective management of natural processes;
- Organic production must respect principle of diversity, interaction, and adaptability in the farm system;
- Organic production seeks to minimize soil loss according to its natural replacement rate;
- Processors are an integral part of the organic system, and must preserve or enhance nutritional value of products, while also minimizing contamination of the product and the environment;
- Auditing is integral to certification;
- Genetically modified organisms are not allowed.

The OCIA certification standards document contains sections on the following major certification issues (OCIA, 1999):

- Section 2: Farm standards (soil, plant, pest management);
- Section 3: Livestock standards (living conditions, feed/supplements, breeding, slaughter, pigs, cattle, sheep, goats, dairy, eggs);
- Section 5: Processing (segregation/protection, pest management, packaging and labelling, audits);
- Section 6: Storage and transportation;
- Section 7: Certification administration (evaluators/certifiers/auditors, OCIA chapters, appeals);
- Section 8: Body care products;
- Section 9: Materials list;
- Section 10: Documentation review process;

· Section 11: Wild sea vegetables.

Thierren's discussion of OCIA standards and audit methodology notes that OCIA standards are fairly specific, although there is some flexibility allowed for new operations or new areas of organic production (Thierren, 1996: 97). Thierren further identified OCIA's strengths and weaknesses, summarized as follows (Thierren, 1996: 108-112):

Strengths

- Inspection process strives to be problem solving and educational for the farmer;
- Thorough inspection process;
- Inspection focuses on priority issues, which are identified in the pre-inspection phase;
- Relatively low cost of inspection and certification to the farmer;
- OCIA's market recognition allows farmers to charge higher premiums for their certified products;
- Peer-managed process with extension advice;
- Regular, periodic inspection schedule.

Weaknesses

- Reliance on farmer volunteers in production improvement process impairs close monitoring functions during the busy summer months;
- Inability to handle challenges of industry growth and complexity of the market.
- Underpaid inspectors may impair quality of audit process;
- Sometimes inadequate communications training for inspectors;
- Unsustainable practices which are identified by the inspectors, but which are not specifically covered by the standards may be reported, but not corrected over the

long term.

The OCIA recognizes that the objectivity and credibility of the certification process is particularly weak, and that this can seriously affect producers' ability to market OCIA-certified product overseas, especially Europe, where import restrictions are complex and rigorously enforced. Currently, OCIA is undertaking a major reform of its audit process, specifically in order to make products more acceptable to the European market (OCIA, 1999). OCIA expects to complete its reform by the end of 2000 (OCIA, 1999).

**Certification**

Although there are dozens of certification standards with varied criteria for organic production, most certification processes typically involve an auditor who visits the farm site in person to conduct the audit investigation. In addition to making a visual inspection of the facility, fields, and livestock, the inspector must also check documentation of monitoring systems and processes. The choice of auditor, timing, and audit process are all important factors, which will affect the soundness and robustness of the certification process. As consumers become more aware of organic production principles and health concerns, they may also exert more influence on certification and audit processes. For example, in the 1970's, after a series of high profile automobile failures, consumer advocate groups became directly involved in developing car safety standards (Gruenwald, 1992). This was a case of consumers taking on responsibility of ensuring that products meet their minimum safety needs.

Similarly, Canadian/North American consumers may eventually take more interest in the mechanics of organic production and certification. However, this will not happen until consumers perceive a higher risk of conventional foods and/or benefits of organic products.

The European market, on the other hand, has been more rigorous in scrutinizing certification processes, especially when it comes to imported products. While many non-European industry groups and government officials complain that it is thinly-disguised protectionist policy, European requirements of organic certification standards and processes have caused certification sponsors such as the OCIA and COAB to continue to develop their standards and processes to be highly accountable, objective, and robust. Even if it is true that the European Union is only interested in protecting its own producers from competitive imports, its imposition of demanding quality control requirements has nevertheless helped to breed standards and processes which will benefit all consumers – domestic and international – of organic products.

**Labelling**

In addition to the integrity of the standard and its audit protocols, organic producers benefit from a product labelling system which distinguishes organic-certified produce from conventionally produced foods. The most important factor in marketing organically certified product is the specific "certified organic" label which the sponsor provides (Richman, 1999). International industry experts have also recommended that a national standard with a recognized shield/label and aggressive public education campaign is key to marketing success (Richman, 1999). In particular, labelling and consumer education are valuable tools which "promote market efficiency by improving customers' information" (OECD, 1994: 43).

In light of the importance of organic labelling, it is therefore imperative for sponsoring agencies to safeguard the integrity and credibility of their labels (Richman, 1999). Misleading claims and watering down production standards can cause consumers to lose confidence in the labels and the products. For example, a German car company earned a notorious reputation

when it misleadingly promoted its car as "environmentally friendly" based on a single minor characteristic (OECD, 1994: 41). More recently, the relaxation of rules regarding harassment of dolphins during tuna catches has prompted concerns that consumers will be confused and misled by the "Dolphin Safe" label on tuna products (U.S. News and World Report, 1999).

Ideally, organic labelling, as part of a broader concept called "eco-labelling", should help to endorse environmental "best practices", spur innovation in production technologies, management, and products, and promote sustainable development overall (OECD, 1994: 194).

Providing consumers with information about an organic label and what it represents is generally perceived to be the purview of the certification program's sponsor (OECD, 1994; Richman, 1999). For example, once COAB completes the process of developing the logistics surrounding labelling, harmonization with ISO protocols, and third-party certification, COAB plans to aggressively promote its "Canada Organic" label to local and international consumers. Based on random personal visits to local Calgary supermarkets in 1999 and 2000[1], it appears that organic producers also rely heavily on educating consumers through product packaging (brief descriptions of production methods and philosophy), and to a much lesser extent, standalone flyers next to product displays. Major developments, such as the announcement of the new national organic standard, can also help to generate excitement and free publicity for organic products (Globe and Mail, 1999; OCIA, 1999*b*).

**Consumer Demand**

Organic labelling will become more important for product marketing as demand for

---

1

Calgary Co-op, October & December 1999; Community Natural Foods, January 2000; Canada Safeway, January 2000; Debaji's, March 2000.

organic foods grows. Unlike foods produced using (non-certified) sustainable agricultural production methods, the demand for certified organic foods can be more easily measured, primarily because it is easier to identify certified producers and measure production output accordingly. However, variances between certification programs can still present problems when it comes to consensus on what is perceived as "organic". This is why estimates of the producer base for organic foods and size and growth of demand worldwide can vary among sources.

Therefore, there is a shortage of reliable data on the size of the organic market worldwide, partly due to the lack of a consistent system to distinguish between organic, transitional, and conventional products. Despite this caveat, there are a few sources that were helpful in defining the size and nature of the organic market potential. These are summarized as follows:

Table 2: Summary of Demand for Organic Foods by Region/Country (all figures in US$)

| | |
|---|---|
| Europe | 1999: $4.5 – $7 billion (projected)<br>2002: $5.2 – 12.3 billion (based on $4.5 billion base figure, projected 5-40% average annual growth) |
| United States | 1999: $4.7 billion<br>2002: $7.1 – 8.9 billion (projected 20-24% average annual growth) |
| Canada | 1999: $2.9 billion<br>2002: $4.4 - 5.6 billion (projected 15-25% average annual growth) |
| Japan | 1998: $200 million - $1.4 billion<br>2000: $2.6 billion (projected)<br>2002: $3.7 billion (projected 20% average annual growth) |

Sources: Ames, 1999; Barber, 1998; COAB, 1999; Dimitri & Richman, 2000; Synchronicity, 1999; Virgin, 1999; Welsh, 1999.

The Organic Trade Association, a large marketing group based in British Columbia, conservatively sets the Canadian market at approximately US$2.9 billion per year (Synchronicity, 1999). The U.S. market in 1997 was estimated at US$4.5 billion (Welsh, 1999), and in 1999 another source estimated demand to be US$4.7 billion (Virgin, 1999). Whole Foods Market, a natural/organic American supermarket chain, recorded sales of US$1.1 billion in 1997 (Foot, 1998: 127). The low U.S. figures compared to the Canadian estimate seem to suggest a difference in data collection and/or categorization methods. There is agreement however, that the North American market will continue to grow at a healthy rate, ranging from 20-30% per year (Virgin, 1999; Welsh, 1999). The Whole Foods Market chain plans to expand its number of stores from 75 (in 1997) to 140 by 2003 (Foot, 1998: 127); an indication that retailers are optimistic about the growth of the organic market. Within ten years, industry watchers expect organic foods to make up 7-10% of the total food market, up from 1.5% currently (Virgin, 1999).

In the U.S., retail store chains with deep pockets have attempted more extensive surveys of the organic market, and it is reasonable to expect that findings in the U.S. are a good indicator of trends in Canada. With this in mind, U.S. statistics suggest that the North American target market has the following characteristics (COAB, 1999; Welsh, 1999; Brickert, 1999):

- The target consumers of organic food typically have higher than average household incomes and education, have children, demonstrate strong store loyalty, and are 20 - 40 years old.
- Target consumers are driven by awareness and benefits of organic foods, tending towards higher consumption of fresh foods (including vegetarianism), a desire to support sustainable agriculture, fears over genetically modified and irradiated foods, and concern for health/environmental issues.
- Large retailers have identified a high consumer demand for organic products.

- Organic products account for approximately 1% of the retail food market, with growth estimated at 15 - 25% annually.
- Organic products sell at price premiums ranging from 10 - 50% above conventional food products. These premiums reflect the generally higher production costs and lower economies of scale of organic producers.

It should be noted that the demand for organic products can vary significantly among regions, even though they may be geographically close. Culture, demographics, and the state of the economy are strong contributing influences, which can explain why organic products may succeed very well in one regional market instead of another one nearby. For example, based on the size of the industry in British Columbia, organic products seem to sell very well in the Canadian West coast (Vancouver area) market. In contrast, retailers and producers seem to be having a difficult sell in the Calgary market (Horricks, 2000). Canada Safeway and IGA experimented with organic produce in the 1990's, but have since dropped those product lines. Similarly, at least one direct-to-home organic retailer has expressed disappointment with the Calgary market (Horricks, 2000). Admittedly, this may be a symptom of Calgary's relatively small population size compared to larger centres such as Toronto, Vancouver, and Montreal, but industry insiders have also suggested that Calgarians may be more conservative when it comes to trying new products which may or may not offer tangible benefits (Horricks, 2000). In contrast, it may be possible that Vancouverites tend to be more open to trying new products and less skeptical of promotional messages.

Nevertheless, despite the encouraging numbers on the growth of the organic market, industry groups have identified an urgent need to more aggressively promote organic products, and to increase supply to meet demand, especially since worldwide supply is currently not meeting demand (COAB, 1999).

Indeed, the majority of Canadian and American organic grain/crop production is exported to Europe, the dominant market for organic products (followed by the U.S., Canada, Australia, and Japan). In 1994, U.S. producers exported US$1.5 billion of organic products to European consumers (COAB, 1999). Current estimates put the total European market between US$4.5 to 7 billion (Ames, 1999; Welsh, 1999). Some European countries have already developed mature markets for organic foods. In Britain, for example, 50% of baby food is certified organic, and experts estimate that the fresh foods and vegetables market is 20% organic (Benjamin, 1999). In addition, British demand was expected to rise by 40% in 1999 (Benjamin, 1999). In Austria, Sweden, and Switzerland, the organic industry has captured 10% of the total agricultural land base, and the rest of Western Europe is expected to catch up to that level by 2005 (Ames, 1999).

In contrast to North American organic food consumers, who are more interested in fresh foods, European demand for organic foods tends more towards easy-to-prepare frozen foods and microwaveable products. Europeans, with their longstanding restrictions on hormone use in livestock, are perhaps the most knowledgeable and concerned consumers regarding the impact of chemicals in agricultural practices. Holland, for example, has undertaken a rigorous chemical reduction program in agricultural practices since the 1950's (Levine and Suzuki, 1993, p. 176). In addition, Europe restricts many genetically modified organisms in food products. For example, a new strain of Canadian canola, which contains leech genes, has been banned in the European market (National Post, 1999*c*).

Currently, Canadian exports to Europe are only the tip of the potential market iceberg. Europe's restrictions on GMO's and hormone-injected beef have effectively barred many organic products – including beef – from entering the European market. In many cases, producers have not been able to prove that their products, although certified organic in Canada, can pass

European inspection. This is why the OCIA organization is in the process of reforming its audit requirements and process to meet European standards (OCIA, 1999).

In Europe, products made with genetically modified organisms must be labelled accordingly. This is another reason for why the new national standard may help Canadian producers to export products to the European Union. For example, seven of the largest British supermarket chains have implemented a zero tolerance policy on GM foods, and are close to eliminating these products from their shelves (This Morning, 1999). Similarly, Japan has been moving towards mandatory labelling on GM foods. Consumers Union compiled an extensive list of studies and surveys (conducted by various government agencies, biotechnology companies, and media), which overwhelmingly show that American consumers strongly support the concept of labelling GM foods (Consumers Union, 1999).

In Canada, recent news reports such as the radio series on CBC radio on GMO's and biotechnology have highlighted the lack of labelling in North America (Quirks and Quarks, 1999), and a recent magazine poll suggested that 81% of North American consumers believe that GM foods should be labelled (Barnett and Wintour, 1999). Perhaps more importantly, 58% of those polled also indicated that they would not buy foods if they were labelled as genetically modified (Barnett and Wintour, 1999). For its part, the Canadian Food Inspection Agency funded a qualitative survey, which was conducted by the National Institute of Nutrition, to study consumers' response to various potential labelling approaches for genetically modified foods (CFIA, 1999). In its report, the Agency concluded that labelling considerably influences consumer perceptions of product attributes and that they favour clear, simple labelling designs which avoid unknown scientific terminology and which are supported by government regulatory approval (CFIA, 1999). Prompted by these concerns, the Canadian General Standards Board [CGSB], in partnership with the Canadian Council of Grocery Distributors, have announced a

plan to develop a national standard for voluntary labelling of foods derived from biotechnology (LeGault, 1999). The CGSB is the same body which collaborated with COAB to develop the national organic standard.

The Japanese market is estimated to range between US$200 million and US$1.4 billion (COAB, 1999), the majority of which is comprised of fresh fruit and vegetables (60%) and processed/frozen food (40%). Although the customer base is smaller than in Europe, the Japanese are the largest per capita consumers of organic food. Unlike the highly restrictive European market, the Japanese market currently puts few restrictions on many organic products, including beef.

**Producers / Suppliers**

With a total worldwide market at US$15 billion, it is not surprising to see industry giants such as General Mills Foods Incorporated exhibit an interest in entering the organic foods market (Virgin, 1999). One of the effects of the maturing of a market sector is that a small, specialized, philosophy-driven sector will eventually grow beyond its original group of innovators, to include those who are more profit-driven. These may even include unethical suppliers and producers who exploit the uncertainty and lack of knowledge in an emerging market sector by selling inferior or at least questionably effective products. Similarly, there are fears that the introduction of big business – motivated primarily by profits, not ecological ideals – will undermine the organic industry by lobbying for looser standards and, using their massive financial resources and slick marketing campaigns, wipe out smaller organic producers who pioneered the organic industry in the first place (Ames, 1999). For consumers, these forces may translate into poor quality products and fewer product choices.

Others, however, predict that the introduction of sophisticated food companies like General Mills and Paterson Grain will be a great boon to the industry for several reasons (Virgin, 1999). First, the participation of brand name companies in the organic industry will help to catch the attention of consumers, wholesalers, and retailers in the food industry. For some consumers at least, this will spur interest in trying organic products. Second, the marketing know-how and deep pockets of multinationals will be a tremendous force in promoting organic foods, thus expanding the overall market for organic foods (OCIA, 1999*b*). Third, multinationals will be the driving force that will encourage mainstream supermarket chains to devote more shelf space to organic foods. This is particularly important, because consumers have indicated an unwillingness to buy organic products if they have to change where they shop (Richman, 1999). Finally, the introduction of large companies introduces a heavy dose of competition to the organic foods industry. This competition – presumably based at least in part on price points – will encourage more research and innovation in production methods, economies of scale, processing, packaging, and labelling (OCIA, 1999*b*).

In the end, it is the consumer's perception of the certification standards, enforcement of the standards, and product quality, which will determine if she accepts the organic label as reliable and valid. Already, the establishment of the new national standard has sparked positive press on the benefits of labelling foods beyond the ingredients list, and into the realm of production practices and genetic background (Globe and Mail, 1999). COAB expects that by the end of 2000, consumers will start to see the "Canada Organic" label on various certified products on supermarket shelves (COAB, 1999).

As with sustainable agriculture, the organic agriculture industry currently does not have a strong central organization whose primary focus is to promote awareness and understanding of organically produced foods. The Canadian Organic Advisory Board [COAB] was instrumental

in developing the national organic standard, and has spent most of 1999 occupied with implementation of the standard, and planning audit protocols and logistics (MacDonald, 1999). When these processes have been established, COAB plans to redirect its efforts to promoting the new standard and organic foods in general (MacDonald, 1999). The Organic Trade Association is also active in the Canadian organic industry. Besides helping producers to facilitate domestic and international trade, this organization compiles statistics on an ongoing basis (OTA, 1999).

**Strategic Considerations**

Based on the previous discussion in this chapter, the strategic issues that face the organic agriculture industry can be summarized as follows:

Strengths

- Organic agriculture features quality assurance through third-party certification according to clear standards.
- Europe, Japan, and North America continue to be the dominant markets for organic food, and current worldwide demand is higher than supply. Producers who are successful at marketing and distributing their products will enjoy a growth market for at least the next several years.
- Genetically modified organisms (GMO's) and irradiated foods are not allowed under most organic standards, including OCIA and the Canadian National Organic Standard. Given the recent media focus on the question of safety of genetically engineered crops and livestock, organic certification automatically distinguishes organic foods as "untainted" by transgenic tampering. It would be particularly timely to highlight this product feature as consumers become more aware of issues regarding GMO's.
- The Canadian national standard will have a high profile and enable certified Canadian producers to export to the huge European market, which has historically been a difficult market to enter.
- In terms of production methods, certification guidance, and standards application, OCIA offers a good support network through its Canadian chapters in Alberta, B.C., and Saskatchewan. OCIA provides assistance in production methods, supplier networks, and marketing support. This guidance should continue to be available for all members of OCIA.

- The OCIA standard is consistently identified in trade journals and some mainstream periodicals as the most popular organic certification system in Canada. This may change with the introduction of Canada's new national standard for organic production. If the national standard becomes more recognized and accepted by consumers, then Canadian members may risk losing marketability if they choose to forego the national standard, and stay with OCIA standards alone.
- With regards to product labelling, OCIA provides support with an established "Certified Organic" label to producers. Again, however, if the Canadian national standard is successfully marketed to the consumer, then it may be more desirable for Canadian members to put the "Canada Organic" sticker label on its products instead of – or in addition to -- the OCIA label.

Weaknesses

- There may be significant differences between certification standards that are administered by different organizations. This may lead to consumer confusion over which standards are "more" organic and which are "less" organic.
- There is very little marketing data collection and research being done for organic foods. This makes it difficult for producers to market their products efficiently and effectively.
- The organic industry does not yet have a strong marketing-focussed body to promote organic foods. This means that most producers have had to learn how to market their products themselves. Thus, successful producers have not been able to easily share their strategies and tactics with other producers. For consumers and retailers, this may perpetuate an image of organic producers as motley, uncoordinated, and possibly unprofessional.
- The current OCIA standard is not fully accepted by the European Union. If the modified version is eventually accepted by the EU, then members will have a new market to

pursue. However, if the Canadian national standard gains stronger acceptance than the OCIA standard, then Canadian members may lose markets if they stay with OCIA certification only.

- There may be initial growing pains for producers and certifiers of the new Canadian standard, similar to the confusion and misunderstandings associated with the early years of organic livestock certification at OCIA. It may be prudent for a producer to adopt a "wait and see" approach before jumping on the national standard bandwagon. This would allow time for the auditors and COAB to establish a smoothly running certification process.

Opportunities

- As more large companies enter the organic industry, consumer awareness of organic foods should increase overall. This will expand the market for all producers.
- Large companies may also benefit the organic industry by firmly establishing organic foods in mainstream retail outlets, thus expanding market reach beyond specialty outlets.
- The new Canadian standard promises to be a powerful tool for producers to enter international -- especially the European Union -- markets, and an opportunity to increase awareness of organic foods in Canada.
- Continuing fears of genetically modified and irradiated foods may propel additional consumer interest in organic foods.

Threats

- As more large companies enter the organic industry, there may be pressure to relax standards, thus compromising quality assurance of organic foods. Even if production methods are not compromised, the reputation of organic foods may be damaged if consumers perceive a drop in quality assurance.

## CHAPTER 5: ORGANIC BEEF

### Definition

Organic beef production is a sub-sector of the organic agriculture industry, and is part of the organic livestock sector. Unlike organic crop production, organic beef production must also address livestock health and welfare issues.

Although producers are expected to strictly adhere to using organic solutions only, the first priority is to treat animals in an ethical and humane manner. In extreme cases, reasonable judgement and common sense, coupled with the prescribed advice of a veterinarian, may dictate a non-organic treatment, in which case the producer may need to sell the treated animal, or risk losing her OCIA certification (MacDonald, 1999). Often, however, in most situations the solution may be to modify production practices to prevent problem recurrence. This is where the sponsoring organization can be called upon to evaluate the problem and advise remedial action. The strength of an alliance with a well-established organization such as the OCIA or California Certified Organic Farmers Organization is that producers can rely upon a support network of other organic livestock producers and veterinarians.

### Certification Requirements

Not all organic certification standards contain protocols for livestock and beef production. Some, like the Canadian Organic Certification Co-operative, are solely concerned with crop agriculture (COCC, 1998). The OCIA and Canadian national organic standards are two of the few programs that have attempted to reach most types of agricultural producers. For the same strategic reasons outlined above (see "Chapter 4: Organic Agriculture"), it would be useful to

outline certification requirements of the OCIA and Canadian national organic programs. The two programs are generally similar in scope and include the following requirements (OCIA, 1999; COAB, 1999):

- Living conditions must allow livestock free movement, protection from exposure to elements, and provide plenty of fresh air, natural light, and water.
- Feeding requirements prohibit non-organic feed, forced early weaning, and feed made with genetically modified organisms.
- Supplements must be from natural sources, and not made with genetically modified organisms. Artificial growth promotants are prohibited.
- Purchased livestock must be non-transgenic (non-genetically modified).
- Herd health must be managed to promote wellness and prevent sickness. Biotherapies are permitted, and organic soaps and natural cleaning methods are encouraged. Therapeutic use of vaccines is allowed only if specific disease is known to be prevalent in the region. In extreme cases, if non-organic treatment is required for an animal, then the animal should be treated, but the animal will lose its organic status, and must be removed from the herd.
- Breeding methods should be natural, and planned to prevent inbreeding. Embryo transfer is prohibited.
- Slaughtering should be done humanely and under sanitary conditions. Organically raised livestock must be segregated from conventionally raised livestock to prevent contamination.
- Physical alterations of animals such as tail cutting, de-beaking, and wing burning are generally prohibited.

**Consumer Demand**

Statistics for this specialized sector of organic agriculture are scarce, however a literature review indicates that the organic beef industry is still relatively small in North America. In the U.S., organic livestock producers (including beef, poultry, etc.) make up 27% of the total organic agriculture industry (Welsh, 1999).

The restrictions on artificial growth hormones and genetically modified organisms are particularly important in understanding the nature of consumer demand for organic beef. Suspicions over the impact of artificial hormones on human health, and over long term effects of genetically engineered foods are strong motivations for consumers to look for food alternatives which minimize these risks (Brickert, 1999; Kneen, 1999; Allen, 1999; Ames, 1999; Canadian Press, 1999; Globe and Mail, 1999; Quirks and Quarks, 1999; This Morning, 1999).

The 1995 EVDS research group's interviews with grocery store retailers and restaurant chefs suggested that the market for organic products was too marginal to pursue or even consider as a serious alternative to conventionally raised agricultural products (Berg, et. al., 1995). Since then, large retailers such as Calgary Co-op now sell processed organic beef products and organic produce year-round (various personal site visits, 1999). Also, the Calgary market has seen an increase in the level of sophistication of organic producers and producer groups, especially in terms of marketing, customer service, and supply capability. For example, several upscale restaurant chefs now rely heavily on organic, local beef and produce suppliers such as Earth to Table (see "Chapter 7: Competition/Product Marketing"). Part of the reason for this turnaround has been the growing awareness and recognition that consumers of organic products are willing to pay a premium for top quality food, and for certain retailers and restaurants, this is a desirable clientele to attract and retain (Genova, 1999).

Internationally, Canadian beef in general is highly regarded by the Japanese, because Canada is perceived to be a clean country with wide open spaces (Barnett, 1997). In particular, Canadian beef exporters have increased their share of the Japanese market in the aftermath of the mad cow panic in Europe (Barnett, 1997).

In contrast, Europe has imported virtually no organic beef from Canada and the U.S. This is because Europe has had a longstanding restriction on hormone-treated beef, and strict enforcement of this rule has led European inspectors to question production methods of beef in general, including organic beef. As a result, trying to export organic beef to Europe was a costly, time-consuming, and ultimately fruitless endeavour.

Although industry insiders insist that the restrictions are primarily driven by protectionism and politics, there are also strong indications that part of the reason for Europeans' skepticism of and restrictions on imported organic products is a growing lack of faith in science and food safety systems, especially in light of recent food problems. For example, the mad cow (bovine spongiform encephalitis) problem in Britain has caused consumers to question the inspection practices of government inspectors and distrust industry representatives who have actively downplayed the problem (Barnett and Wintour, 1999; Sternberg, 1999). Similarly, hormone-treated beef has been linked to premature puberty and breast cancer in women (Brickert, 1999).

These consumer concerns will continue to drive the organic beef market, and the European Union in particular is unlikely to relax its stance on hormone-treated livestock. The establishment of the Canadian National Organic Standard on organic products, certified according to ISO audit requirements, may be the mechanism that will help to open up the European market to "Canada Organic" beef producers.

## CHAPTER 6: ORGANIZATIONAL ANALYSIS

Most PDWR members were interviewed in three sessions during 1998. The results of these interviews are disseminated in this chapter. All interviews were conducted with the acknowledgement that individual responses would be attributed to PDWR as a group. This approach was taken to allow members to voice opinions and contribute information that may have been of a sensitive nature, but which are nonetheless crucial to understanding difficult issues that the company may be facing. As a result of this approach, the discussion that follows is deliberately written in a manner that avoids making specific references to family members or ranch families.

### Incorporation of Producers of The Diamond Willow Range

#### Inception

During the 1995 fall session, a group of EVDS students worked on an EVDS 702 project (Berg, et. al., 1995) for two ranch families in Pincher Creek, Alberta. The objectives of the study were to:

1. Evaluate the sustainability of ranching principles as practiced by the Ketaorati and Stillridge ranches.
2. Recommend an effective consumer education approach.
3. Identify options by which the Ketaorati and Stillridge ranches may effectively introduce the concepts, application, and marketing of their version of sustainable ranching to other producers.

4. Recommend an effective business strategy that will allow the clients to realize their vision.

The project report for the 702 study concluded with the following:

I. The ranch operations were deemed to be run in an environmentally sustainable manner, based on the recommendations and guidelines as espoused by various government agencies, agricultural groups, and scientific literature.

II. Recommended that the ranchers develop an organizational structure to aid in the education of consumers. Reported on Oregon Country Beef (OCB) as an example.

III. Recommended that the ranchers follow a Community Economic Development approach to introduce the benefits of their practices to other cattle producers in the area. Offered the OCB as an example of how to achieve this.

IV. Determined that a market exists, and provided a description of the demographics of that market, and recommended a strategy for marketing organic beef.

In February 1997 the Producers of the Diamond Willow Range (PDWR) was incorporated. It is a limited company, started up by eight ranch families in southern Alberta, of whom Ketaorati and Stillridge ranches are members. Each member ranch holds one share in the company. The company holds negligible assets. Instead, it operates as the collective's marketing

arm, by generating sales and facilitating distribution of the member producers' cattle to the organic market. The company's mission statement is as follows (PDWR, 1996):

> *We aim to produce top quality beef in harmony with the local ecosystem. The certification standards of the Organic Crop Improvement Association (OCIA) are compatible with our environmentally sustainable production methods.*
>
> *Diamond Willow Range will achieve a high level of communication with the consumer in order to build awareness of our organic product and environmental practices, and meet market needs on a financially sustainable basis. By maintaining control over our production from birth to retail, we are able to quickly respond to consumer feedback.*

Membership

The owners of PDWR started out with eight ranch families in Southern Alberta. In 1999, one of the ranch families decided to leave the company. Production capacities of individual ranches range from approximately 100 to 250 head of cattle, all of them cow-calf operations (please refer to the "Production" section of this chapter for a detailed description of PDWR's past and current production practices). Each member paid $150 to become shareholders. One of the ranch members also fulfils a double duty by running the feedlot that PDWR uses.

As demand for PDWR products increases, some members hope that more new members will join the company. These new members may not necessarily be ranchers only; there is an

opportunity to include organic grain/feed suppliers, non-beef livestock producers (i.e., chickens, emu, sheep, turkey), and processors.

**Production Practices**

Product Management

The original EVDS 702 project team identified several competing organic standards and recommended OCIA, based on its popularity and support network (Berg, et. al., 1995). The members of PDWR have since chosen to follow the OCIA standard for organic beef. Furthermore, interviews with PDWR members suggest strong commitment to staying with OCIA. At the time of the first set of interviews, most of the cattle produced for PDWR were rated as "transitional"[1] organic, according to the certification standards of the OCIA (PDWR, 1998*a*). By the spring of 1999, most of the cattle (both cows and calves) produced were certified as fully organic. As of June 2000, all cattle produced by PDWR are fully certified OCIA organic.

At the time of transition to organic production, the number and extent of changes in production practices varied widely among members. For example, some members had already limited the use of antibiotics to specific treatment of a disease outbreak on affected cattle only. This is in contrast to conventional ranching practices, where antibiotics are often used even when cattle are not affected by disease. One PDWR ranch even resisted using an insecticide for warbles (an insect pest which burrows into the skin of cattle) despite an existing regional

1 "Transitional" organic is an OCIA status which indicates that a farmer's production process complies with organic standards, but the land and/or animals cannot be certified until a specific amount of time has passed. Presumably during this time period, non-organic residues should dissipate to negligible traces.

program which encouraged its use. Most members had never used growth hormones and implants. Some ranchers only used herbicides on a spot basis on localized problem areas for particularly noxious weeds, such as thistle. Some of the ranchers who produced cattle with fewer of these inputs characterized their product as "natural"[1] (not "organic").

Some additional changes that members made in their production practices include:

- Changed mineral supplements to organic brands and/or eliminated the use of certain types of supplements. At least one ranch has found that the organic supplements are less efficient, because cattle need to eat twice as much of the expensive organic supplements to achieve the same results as the less expensive non-organic supplements[2].
- Switched from conventional to organic hay suppliers.
- Switched to organic fertilizers such as rock phosphate (some of these products do not have a proven track record of effectiveness).
- To reduce stress of transportation from ranch to feedlot, switched from liner transportation to horse-led cattle drive.
- Members with property near petroleum processing plants requested that their oil company neighbours stop spraying herbicides adjacent to their property.
- Implemented periodic water and soil testing procedures to ensure compliance with OCIA contamination standards (these test results are not being collected or tracked by PDWR).

---

1 "Natural" production is loosely defined as a practice which is similar to organic production in that it seeks to minimize artificial inputs and animal stress, but which is not certified by any accredited standard. "Natural production" is not a legally defined term.

2 Organic supplements are inputs which have been approved by the certifying agency to be permitted as part of the organic production process. Non-organic supplements are inputs which are not allowed in the organic production process.

- Built/modified dugout systems to better prevent pollution into natural waterways, and to ensure a cleaner water supply for cattle.
- Virtually eliminated herbicide and pesticide use on croplands by exercising only spot spraying on trouble areas, and hand-picking weeds.
- Improved record-keeping systems for antibiotics usage.
- Stopped using chemical lice control programs. Some members noted that cattle required more hay in winter in order to remain healthy, because lice populations were higher without the chemical controls. Even with the higher feed intake, cattle still seemed to be more stressed and unhealthy without the chemical controls. However, as of spring 2000, additional organic pest prevention measures have marginalised this problem (PDWR, 2000).

PDWR's initial experiences with OCIA standards were not promising. According to PDWR members, organic beef certification for larger, commercial-scale operations was not a "tried and true" process at the time (during 1997-1998). Indeed, several members noted that the certification process was frustrating, mostly due to uncertainty over which practices were and were not allowed. It became apparent early on that certifying PDWR ranchers would be a pioneering effort to apply OCIA beef production standards on a larger commercial scale, especially pertaining to production methods and auditing requirements. Members noted that the independent auditors who were hired to run the certification audits did not really understand how livestock operations worked. Instead, these auditors seemed to come from a crop background, not a livestock background. One example of the certification confusion arose when OCIA and the auditors could not decide if a mineral supplement, ANIPRO, was acceptable under the certification standards, when the OCIA issued inconsistent opinions about the product (PDWR, 1998b).

Even after the ranchers and certifiers cleared up the confusion, there still remains, among some members, some questions and skepticism regarding the appropriateness of certain requirements. For example, some members questioned the reasoning for why some vaccines were considered acceptable, while others – especially the most effective ones – were not. Furthermore, they wondered how vaccine use would contribute to the "organic-ness" of the product. Some members also argued that a one-time therapeutic use of penicillin or other antibiotics should be acceptable, especially if the animal is given 18 months for the treatment to clear the animal's system. Members suspect that all traces would be cleared out by then (PDWR, 1998*c*). Another member challenged the scientific validity and justifications for disallowing chemical fertilizers and refusing to certify land near a petroleum processing plant. One of the PDWR members argued that there was probably more direct damage caused to air quality from tractor exhaust than from the processing plant. In the member's opinion, this was a hypocritical decision (PDWR, 1998*a*).

Another issue related to certification requirements is the questionable effectiveness of some of the organic-approved products, especially those that replaced non-organic approved products which already had proven effectiveness. Not only have some of these products proven to be less effective, they are also more expensive, and in some cases required ranchers to use higher quantities of the new expensive product, just to achieve the same level of results from using lower quantities of the less expensive, but non-organic old products. Examples of these organic, but less effective and more expensive inputs include mineral supplements, hay, and lice control treatments (PDWR, 1998*c*). More alarmingly, the switch to organic inputs seemed to have initially contributed to higher stress and the decline of healthiness of the animals (PDWR, 1998*c*). However, as of spring 2000, members have virtually eliminated these problems by adopting more rigorous sickness prevention measures and further stress minimization of animals (PDWR, 2000).

Despite these shortcomings, OCIA standards had, at the time of adoption by PDWR, the most credibility, the highest profile, and the most widespread support network among producers in North America and Europe. In contrast, competing certification standards such as the COCC simply did not have the same level of recognition or credibility. The EVDS 702 project document also recommended OCIA as the best certification alternative for marketing purposes (Berg et. al., 1995) for the same reasons.

After members made changes in production practices, OCIA standards required that fields must wait three years (to allow non-organic residues from conventional fertilizers, herbicides, and pesticides to dissipate) before organic certification. During this period, members' livestock and land were deemed to be "transitional organic". For most members, certification of fields was achieved before certification of livestock, because landscape maintenance tended to be already close to OCIA standards. One of the ranches, however, did have to sacrifice some pastureland due to its close proximity to a petroleum processing plant; under OCIA guidelines, this parcel of land could not ever be certified organic. To achieve conformance with the standard, the parcel of land was sold.

Another negative short-term effect was the death of calves due to restricted use of medication. At least one ranch reported lost calves which were directly attributable to the change in production practices. However, members noted that this was be a short-lived problem until ranchers developed a healthy, low-input herd, and until disease prevention measures were improved and streamlined (PDWR, 2000).

Also related to this problem was the loss of production on cropland due to elimination of pesticides and herbicides and the restricted use of fertilizers and new "natural" fertilizers.

Another ranch reported a 50% loss of production. A troubling factor is that the "natural" fertilizer has not proven to be as effective as the old product.

One of the problems with organic production is the lack of reliability of supply of organic grain and hay, mostly due to relatively few local suppliers. In addition, shortages of these supplies has led to short-term price volatility. Since feed is an important input cost, high prices for these inputs has significantly affected PDWR's profitability. Some of the members are seriously considering producing their own organic hay and grain. This self-sufficiency would help to increase reliability of supply, and insulate against price swings in the market. The challenge of this strategy is that ranchers must work with unproven inputs such as natural fertilizer.

Despite these changes in production practices and some of the initial negative effects on herd health and ranch productivity, some members noted that changes in productivity are ultimately most directly affected by weather/climatic conditions and other local environmental factors.

One of the results of moving to OCIA has been the increased awareness and need to reduce herd stress, so that individual animals are better able to naturally cope with environmental conditions and resist disease and pests. Among PDWR members, there has been discussion to explore new avenues to deal with this issue. For example, in the future some ranchers may start to calve later in the spring. This may help to improve the health of cows and calves, because if cows start feeding on spring grass before calving, that should help to improve strength for calving. In addition, calves which are born later are less likely to have to deal with inclement late winter conditions while they are still very young and weak. Also, one of the members suggested

fall calving as an alternative to help spread out the availability of yearlings more evenly throughout the year.

Cattle breeds raised by PDWR members are variable, including crosses of Hereford, Angus, Shaver, Beef Booster, and Charolais breeds. These are the same varieties that members raised before they joined PDWR; there was no change in breeds as a result of PDWR.

Production capacity varies by ranch. Some members have enough land base to increase cattle production for the future, while others are already close to their production limits. Even if the land base has the capacity for more livestock, some members lack the financial capacity to invest in more livestock. Nevertheless, there are several PDWR members who are currently purchasing additional organic cattle and feed to increase their production output. However, the growing demand for organic inputs, coupled with seasonal shortages of supply, has led to significant swings in prices, causing higher and unforeseen input costs for PDWR members.

Quality control of product has been improved in order to comply with OCIA standards. As one member remarked, his family ranch no longer produces "scrubby stuff". Sub-standard calves and yearlings are strictly sold in the mainstream market; they are *not* permitted to be sold through PDWR.

Ecosystem Management

The OCIA standards also set out guidelines for selected landscape management issues (OCIA, 1997), including:

- riparian / water quality

- pasture rotation

As described in earlier chapters, OCIA guidelines are specifically aimed at producing a high quality, minimum-input, healthy livestock.

Currently, PDWR is not using any formal environmental audit system in a comprehensive attempt to measure its level of sustainability in the same way that it uses and adheres to OCIA standards as a framework to measure its "organic-ness". Nevertheless, in addition to OCIA ecosystem-related standards, some PDWR members are carrying out trend analyses on selected wildlife species, however it will take many more years of monitoring to see if PDWR's ranching practices significantly contribute to sustainable landscape use. Even then, the tracking may not be consistent and comprehensive enough among all members to be completely useful. Also, counting wildlife may not be an ideal measure of sustainability, since wildlife tends to be mobile, and they tend to be more susceptible to other non-ranching factors such as environment, climate, natural disasters, and human activities such as hunting, poaching, and industrial and road development (Fitch, 1998).

**Business Processes**

Sales/Distribution

The major focus of the organization's activities is to initiate sale of cattle to customers who specifically want to buy organically certified beef. Throughout the year, PDWR pays the feedlot operator (who also happens to be a PDWR ranch member and Director on the Board) to maintain a minimum number of cattle in a feedlot, where the cattle are fed organic finishers which are paid for and supplied by PDWR. The number of PDWR cattle kept at the feedlot is

determined by short-term anticipated delivery requirements, plus an extra number to be used as a safety buffer in case some cattle are not fit for organic sale (these are identified at the point of slaughter or processing). When a delivery is required, the cattle are slaughtered and processed, again separate from conventionally raised cattle. Beef destined for non-Alberta customers are currently slaughtered and processed at a federally inspected plant, while local provincial customers receive beef from provincially inspected plants. Due to the additional requirements of federal regulations, it costs more to process beef through federally inspected plants. All meat is sold frozen to the customer.

In 1998, an average of 10-15% of cattle produced by PDWR members was sold through this process. By Spring 2000, approximately 80-90% of cattle were sold through PDWR (PDWR, 2000). The remainder is sold by the ranchers to their neighbours, friends, and relatives. These are private sales which do not go through PDWR. As of June 2000, PDWR's major production challenge is to produce and/or purchase additional organic cattle for sale through PDWR (PDWR, 2000). The company is in the enviable position of racing to keep up with demand for its product. Short-term shortages of product are covered by purchasing cattle from organic ranchers in Saskatchewan, Alberta, and Montana (PDWR, 2000).

Up to the point when cattle leave the feedlot, the individual rancher is responsible for handling and care of the cattle, including paying for feed costs at the feedlot, and transportation to the feedlot. Once the cattle leave the feedlot, PDWR takes on responsibility for arranging transport to the slaughter and processing facility, processing costs, and costs of delivery to the customer. Throughout this process, ownership of the cattle remains with the rancher up until the processed product is delivered to the customer. PDWR's role is to bill the customer, collect payment, deduct all of PDWR's transport, slaughter, and delivery costs, and remit the net proceeds to the rancher. Currently, the time lag between delivery of the product to the customer

and receipt of the final cheque to the ranch is approximately six weeks. This is in contrast to conventional sales, where ranchers receive payment within two days of the fall auction sale. Conventional cattle sales are primarily conducted during the fall and spring, when ranchers sell their cattle to beef processors such as Cargill or XL Foods. Once the sale is made, ranchers receive payment within two days of the sale, and the buyers take possession of the cattle by transporting them from the ranch to the feedlot. Under the conventional trade system, the ranchers' ownership ends when the cattle leave the ranch.

In the first year of operation, PDWR lost track of a few head of cattle after they had been sent to the feedlot (at that time, the feedlot was not being run by a PDWR member). The tracking system has since improved, however the early losses that PDWR had to absorb significantly affected profitability. With the installation of the General Manager (see "Administration" section of the chapter) to coordinate sales and distribution efforts, PDWR has solved the problem of lost calves. In addition, since the feedlot is now operated by a PDWR member, members have reported that the situation has improved considerably (PDWR, 2000).

Another problem that was identified by members is that weight gain per day at the feedlot seemed to be only about half that of conventional cattle in the same feedlot. There were no explanations offered, however, it seemed to be related to the quality of feed and stress at the feedlot.

Some members identified the processing and kill plants as the weak links in the product delivery chain. Initially, PDWR had to go through considerable effort to find plants that would separately kill and process PDWR cattle according to OCIA standards. Additionally, since the number of cattle processed for PDWR is a fraction of the plants' normal number of conventional cattle, PDWR had found that it is difficult to control quality and organic requirements of

processing. Also, prices charged by kill plants is quite high due to the low number of cattle (economies of scale) and special procedures required to conform to OCIA standards. There was even a feasibility study to check on PDWR building its own kill and processing plant, where offal would be sent to Korea. This idea was rejected for the short-term due to high costs and lack of time commitment required to oversee such a project. Another problem with processing plants is the high cost of procuring and purchasing organic feed for the feedlot cattle. However, ever since PDWR switched processors to another company called Bovary, which is 100% dedicated to slaughtering and processing only organic beef, members have reported much higher satisfaction with the quality and costs (PDWR, 2000).

Administration

At first, administrative responsibilities had been shared on a volunteer basis by various family members of the ranches. In the fall of 1997, PDWR created a paid position for "General Manager". This person is responsible for all accounting and administrative duties, including processing sales and costs, collecting payment for customers, paying bills, organizing monthly board meetings, sales and marketing, and administering PDWR's livestock tracking system. This position is held by one of the directors on the PDWR Board.

Some members suggested that the GM's responsibilities should also include coordinating a centralized production tracking system, which entails keeping records on inoculations, veterinary treatments, feeding schedules, weight gain histories, and birth statistics for every head of cattle in the herds. Currently, individual members already do this for their own herds (indeed, this is a standard practice for most livestock producers), however record-keeping systems and comprehensiveness and detail of the data kept is inconsistent between members in PDWR.

The establishment of the GM position has meant that administration and accounting functions are getting more organized and the learning curve for these activities is beginning to flatten out, however dissemination of information to members, such as profitability analyses, and prices for sales transactions, need to be improved, according to some of the members.

Planning and decision-making is done at monthly Board of Directors meetings. Each ranch family is a member of the board, and all family members are encouraged to participate in the meetings.

In the course of interviewing members for this study, one of the main issues that was raised with regards to members' participation in PDWR's administration, was the limited amount of time that members could contribute. In particular, the modifications in ranch and livestock management, especially as required by OCIA standards, further eroded the time and effort that members could afford to spend on managing PDWR's growth.

Finance

The only financing that was made was the $150 shareholder contribution by each ranch member, which was used for startup costs and supplies. So far, there has been no need for additional financing. Overhead expenses, such as annual incorporation fees, office supplies, and the GM's salary are paid out from sale proceeds. For the future, there may be a need for financing to cover purchase of organic feed for the feedlots, and to cover potential costs of legal fees and regulatory costs related to marketing and promotion. Also, there is a possibility that PDWR may decide to expand production by purchasing more organic cattle from outside the organization. To this end, a line of credit has been opened in PDWR's name, however it has not yet been used (PDWR, 2000)

A more immediate need that was identified by some members was the additional burden of covering higher production costs which are required by individual ranches for transportation, organic feed, and compliance with OCIA standards in production practices. It should be noted that the need for additional up-front cost adjustments and changes in production practices was not the same for all members. Indeed, some ranches were already in a good position to easily conform to OCIA standards with little additional costs. Others, however, faced significant financial and operational challenges to conform to standards.

Information Systems

As part of the OCIA auditing requirement, all members are required to track every individual head of cattle, from birth to slaughter (PDWR, 1998*a*). This process includes documentation of health treatments, feeding amounts, weight gain, bloodlines, and supplements. PDWR goes a step further by tracking statistics of the cattle up to the point of delivery to the customer. Although the requirement to track cattle statistics did not change for each member under PDWR, there are some significant differences between members in the type, consistency, and quality of the data tracked. Often, this is due to ranch-specific environmental factors. For example, a season of particularly heavy snowfall can make access to cattle extremely difficult, resulting in delays or permanently ruin a ranch's ability to track cattle for an entire season. In addition, OCIA requires documentation of tracking statistics, something that some members were only keeping "in their heads". For one ranch, tracking helped to distinguish between its two streams of cattle (conventional vs. organic).

Individually, each ranch is responsible for its own tracking system, however there is no standard template for the type, quality, and measurement of data collected. Currently, PDWR is

testing a central computerized tracking system into which all members enter their data. In order to ensure consistency and completeness of the data for comparison, statistical, and reporting purposes, the members had to agree on a standard for data collection. The system is currently undergoing an audit with OCIA. There will also be a federal mandate for beef producers to track data, to be enacted within two years (PDWR, 1998*a*). In that case, there will be a need to harmonize PDWR's tracking system to comply with these standards.

PDWR has its own tracking system for cattle after it leaves the feedlot, up to delivery to the customer. This measure is used to ensure quality assurance for the customer, and allows PDWR to identify where quality problems arise, so that the ranch source can quickly address them. This is a critical component of PDWR's guarantee of product quality, and essential to demonstrate credibility to the customer. Initially, the feedlot used to be a weak link in this chain, because the feedlot operators did not rigorously keep track of tag numbers and records of feedlot weight gain were highly suspect. However, ever since one of the PDWR members started running the feedlot, the tracking process has improved considerably.

All accounting and business-related transactions are the responsibility of the GM. Some members identified the need to improve the breakdown and reporting of the cost structure, ratios, profitability, break-even analysis, and other economic measurements of PDWR's activities, in order to have a better understanding and control of the company's profitability.

Marketing

Before PDWR, ranchers who were particularly active in marketing their cattle (not all were), tended to engage in marketing activities where buyers were invited to visit and tour the

ranch outside of the usual fall/spring sale seasons. Although this was not a very aggressive approach, it was nevertheless well suited to the conventional market.

Initially, after PDWR was created, marketing was done on a volunteer basis, spread out among selected PDWR members according to experience, interest, and time availability. For example, the PDWR brochure (see "Appendix B") was created by three family members, customer barbecues were organized by another family, and cold calls and customer visits were carried out by the daughter of another family.

However, there was a lack of consistency in time availability, skill levels, personal contact with customers, and allotment of responsibilities. Furthermore, some participants have had to withdraw from these efforts due to conflicting priorities due to seasonal production duties and career commitments. The formation of an ad hoc marketing "team" started out as a promising concept. It was the efforts of this team which produced the initial promotional materials for PDWR. However, within one year, the team had largely disbanded due to burnout, lack of time and effort required, and conflicting priorities. The installment of the General Manager to oversee, organize, and implement these activities has provided more consistency in marketing efforts, however there is still a strong need to include other members to carry out assorted duties, including customer contacts. This has been a disadvantage, because customers (especially retail outlets) are not always comfortable dealing with many different representatives of a single supplier. This problem was partially resolved when PDWR hired a B.C. broker in late 1998 to market its beef in the local Vancouver/Victoria market. This relieved PDWR members from long-distance marketing efforts in this highly lucrative region. Following the success of the B.C. broker experience, PDWR has also recently negotiated a contract with a broker in Quebec, and is currently negotiating for an Alberta-based broker to handle local marketing.

Advertising and promotional materials were created. Brochures were created for distribution to buyers and to retail outlets for consumers, where the product is sold (see "Appendix B"). Several posters were created for display at retail outlets. A promotional folder was created to aid in selling to new buyers. This material was created through tapping the existing talent from within the PDWR membership. Additional materials include articles and other clippings written about the company, as well as customized promotional packages produced by PDWR. PDWR members estimate that future customers will primarily come from more restaurants and specialty food stores.

Initially, sales were generated by cold calls and site visits by the General Manager. Potential buyers were identified based on referrals from current customers, checking through trade journals, and on news of openings of new retail outlets. As of June 2000, PDWR now receives unsolicited inquiries for products through word of mouth advertising. If applicable, these inquiries are referred to the appropriate broker, who then arranges sales contracts and transactions. Interviews with PDWR members suggest that there is some divergence of opinion as to who is and who should be PDWR's target market. Some identified the niche market of natural food stores, and believed that expansion would have to happen by entering new cities with specialty stores, while others more ambitiously identified expansion opportunities through pursuing consumers who shop at mainstream grocery chains (these members also admitted that this would be a difficult endeavour). It should be noted that although brokers are generally responsible for arranging sales, PDWR members (the General Manager in particular) are heavily involved in establishing and maintaining customer goodwill by participating in important meetings with customers and participating in promotional barbecues.

As of Spring 1998, PDWR's customer base consisted of a restaurant chain in BC, local meat shops in Calgary, and several health food grocery stores in Calgary. These included

Community Natural Foods, Peppers Restaurants, and Specialty Fine Foods. Since then, Community Natural Foods has dropped PDWR in favour of TK Ranch, a competing natural beef producer based in central Alberta. As of Spring 2000, the customer base has expanded into B.C. and Quebec. PDWR has also been involved in lengthy negotiations with a Japanese customer.

One of the marketing challenges facing PDWR is the confusion and lack of knowledge over the definition of organic beef. For example, during a 1998 visit with two PDWR members, a retail outlet in Calgary which specialized in organic/natural foods was found to be advertising organic beef in its store, but upon questioning the butcher there, it was found that the beef (produced by one of PDWR's competitors) was not certified organic by any recognized standards. Even the butcher seemed unaware of what constituted organic beef. Although this was a one-time, ad hoc encounter, it seemed to be indicative of a confusion which was largely attributed to the lack -- at the time -- of a federally-enforced definition of "organic" as a legally-recognized trade and product term. Often, "organic" and "natural" beef is perceived to be the same thing (see "Chapter 7: Competition and Product Marketing Analysis"). With the establishment of the Canadian national standard, it is hoped that there will be more awareness of the nature of organic production.

Customer feedback is collected primarily through the General Manager. Retail buyers have noted that most customers are not very knowledgeable about the concept of organic beef and the production process (PDWR, 1998*a*).

Most members acknowledge their lack of expertise in marketing skills, and the overwhelming practicality of hiring a professional to market the product, but some maintain that it is preferable to market the product themselves. One member suggested that PDWR members learn to market PDWR as a production philosophy, and to let the sale of product follow naturally

from that premise. There was also the suggestion that PDWR should emphasize the importance of meeting customers more frequently, and to establish closer relationships with customers, in order to increase awareness of PDWR's distinctive philosophy. This strategy is especially suited for the short term, since PDWR members are most qualified to do this, and because PDWR does not have a budget to hire non-PDWR employees. PDWR's success in using brokers has prompted the company to expand through hiring additional brokers for future expansion. Although PDWR members will still be required to fulfill a customer service and contact role, the use of professional brokers relieves members of primary marketing responsibilities while still maintaining control over the general direction of marketing and growth efforts.

In order to continue to grow, additional marketing challenges include raising PDWR's profile, competing in a niche market, and positioning for long-term growth management. Some members are convinced that despite the steep learning curve and effort required, "owner marketing" is more desirable because owners are more knowledgeable about the product and tend to be more motivated.

**Profitability**

Members

Most members agree that the variable costs of producing organic beef is currently slightly higher than those for conventional beef. Additionally, these costs vary among members, and for some represent a major challenge. Some of these higher costs include mineral supplements, feed costs, pesticides, and veterinary costs. New costs include feedlot grain, transportation to feedlot, processing costs, and the additional risk of calf deaths at the feedlot and during transportation to the feedlot. This has translated into higher costs per head, especially when coupled with low

volumes of cattle per sale transaction. In addition, productivity per acre is slightly lower due to the principle of not overusing land and water resources.

The cash flow delay is of more concern to those members where a higher proportion of their cattle is sold through PDWR, instead of through the conventional fall auction. For smaller members this has been raised as a concern, especially since traditional debt structuring is arranged around high seasonal cash inflows during the fall. However, some members also acknowledged that the extra PDWR income cash flow, which is spread out throughout the year, can also be an advantage when cash flow is low during the rest of the year.

The cost of OCIA certification is approximately $400 per year, and is borne by each ranch (PDWR, 2000). For this fee, an independent, OCIA-authorized auditor carries out an inspection of the ranch's operations to ensure compliance with OCIA standards.

Before PDWR, members had varying opinions on their future profitability. These opinions seemed to be related to where the rancher's operations were at in the life cycle curve. For example, members who had just started up their operations recently, tended to be more optimistic about their future as producers for the conventional market. These ranchers were primarily focused on profitability growth through herd expansion. In contrast, more established ranchers who had already achieved relative cost stabilization and who were close to maximum capacity, were less optimistic about long term profit growth in the conventional market. Instead, these ranchers' operations were less focused on herd expansion, and more focused on maintaining ecosystem capacity in order to maximize profitability per head of cattle.

Overhead and variable costs are in some ways significantly different under the organic production process, however most ranchers suggested that there was significant room to

streamline costs and maximize economies of scale. These will be achieved through experience and learning from each other. However, it should be noted that many of the members were already practicing low-input, near-organic production practices. As a result, cost structure should not significantly change for these ranchers.

Overall, members expressed optimism over future profitability because prices for organic beef seems to be more stable than prices for conventional beef, which often experience wide price swings due to uncontrollable market and environmental conditions such as macroeconomic variables, seasonal climate, and international demand and supply. Also, some members noted that profit margins for organic beef are starting to become more favourable than those for conventional beef.

PDWR

The company currently operates on a break-even basis, such that all costs are covered by sales revenues. The net profit from each sale transaction is forwarded directly and immediately to the member who owned the cattle. By maintaining shareholder equity, the company, in essence, operates to produce profit for the members, not for itself.

**Human Resources**

Internal

Except for the recently installed General Manager position, all contributions by ranch members and their families have been on a volunteer basis. However, due to priorities on the ranch and time limitations, there had been a lack of consistency in the assignment of duties

related to marketing and administration. The time commitment required to handle accounting and administrative tasks was deemed to be high enough to justify a salaried General Manager position.

The GM position has helped to alleviate most of the inconsistencies, especially in the area of accounting and administration. Also, although marketing is organized by the GM, ranch members do still contribute some of their time and effort whenever possible, although it has tended to be on a seasonal, limited basis. In effect, the majority of administrative/marketing duties has fallen on the shoulders of 2-3 family members (non-related) who have by default taken on these heavy responsibilities which, given the amount of time and travel involved, should perhaps be more equally shared among all members.

All members who had contributed to the operations of PDWR in administration, marketing, planning, and research, have expressed a positive benefit from the industry experience that they gained. Members were very satisfied with learning more about the downstream aspects of their industry, and as a result felt more in control of PDWR's success or failure. Some of the issues that members learned firsthand included consumer preferences on cuts of meat, product grading, transportation, importance of carcass and cut sizes, and the difficulty of selling non-prime cuts.

Members participated in projects such as researching the regulatory requirements of selling across provincial and international boundaries, developing marketing material, planning and conducting ranch tours to clients, and researching organic certification options.

All project proposals, including those initiated by external parties, are reviewed and approved by the Board of Directors. Future projects may include researching an organizational

and/or business restructuring to allow PDWR to buy outside cattle for future growth. This is in contrast to its current operation, where PDWR itself does not own cattle. Another project that has been given consideration is an organic grain feedlot cost analysis to minimize costs while improving stability of quantity and quality of supply.

One of the issues raised by members was that there seemed to be an imbalance in the time and effort contributed by PDWR members. Indeed, in the course of interviewing members for this report, it was noted that some families were far more heavily involved in the start-up and operational activities of PDWR than other members.

External

Beginning with the 1995 feasibility study (Berg, et. al., 1995), PDWR members have taken advantage of good quality, relatively inexpensive external resources. Among the more notable contributors identified by PDWR members are:

Oregon Country Beef

Doc and Connie Hatfield, founding members of OCB, were instrumental in providing startup advice and relating some of the lessons and experiences that helped PDWR to avoid some of the hurdles during startup. PDWR members visited Oregon to tour their ranch and get firsthand advice.

John Whitehead / Gordon Williams

Have proposed and facilitated projects on cost evaluations, sustainable development practices, and organizational strategic planning.

Mr. Lee

A business consultant, Mr. Lee assisted with corporation startup and collaborating with membership to create a mission statement.

Anne Grover

Once a potential member, she helped to put together a business time line and identified milestones for business planning.

Dale Hyland (Farm Business Management Initiatives)

Currently working on a long-term business strategy exercise with PDWR members. This strategy will help PDWR to make long-term decisions which can assist in acquiring financing (if required) from banks.

Irene Mihailuk (OCIA)

Assisted with OCIA certification guidelines and contacts.

Projects which are initiated by outside groups (especially those that require funding and/or effort on the part of PDWR or its members) are reviewed and evaluated for their usefulness to the group, and approved or denied accordingly at Board meetings. Since PDWR operates on a negligible asset base, cost is an overriding factor in decision-making. Future projects that PDWR would like to tackle include training in contract law (to assist in dealing with customers and feed suppliers), and exploring the feasibility of debt financing for business expansion.

**Business Life Cycle**

According to Albrecht's business life cycle model (see "Table 3: Business life cycles"), PDWR has moved beyond the initial "Survivor Group/Individual" stage, which is typified by "one or more highly motivated entrepreneurs [who] have formed a work group and decided to make a go of their ideas, dreams, and plans" (Albrecht, 1994: 269). Furthermore, in the first few years since its founding, PDWR members have divided the workload, "with certain people tending towards their strengths and avoiding their weaknesses" (Albrecht, 1994: 269). Businesses in this first life cycle stage tend to be idea-strong and resource-weak, but despite an uncertain future, the founders are driven by hope and entrepreneurial spirit. At this stage, cash and customers have yet to be earned.

Instead, examination of PDWR's current activities suggest that it has moved into the second stage, "Family/Growth". At this stage, founders have "found enough cash and customers to keep the doors open" (Albrecht, 1994:269) and the business can afford to hire a few support people. And although duties and departments begin to take on clearer boundaries, "there is still a level of business informality that says, 'All for one and one for all'" (Albrecht, 1994: 269). In the meantime, the company starts to expand, and business processes may need to be overhauled to keep pace with business needs.

In order to move on to the "Expansion" stage, PDWR must achieve steady sales, and customer service will become a critical component of maintaining customer loyalty. Business processes must become further compartmentalized and distinct, in accordance with business needs.

Table 3: Business life cycles

| Life Cycle Stage | Characteristics | Critical Success Factors |
|---|---|---|
| Survivor Group / Individual | Founding stage; a few highly motivated individuals; work equally divided informally; idea-strong, resource-weak. | Find customers; generate cash flow. |
| Family / Growth | Generating enough sales to keep the doors open; a few employees hired to handle administration and front-line service tasks; formally assigned duties; still retains entrepreneurial spirit of "one for all and all for one". | Overhaul/fine-tune production processes and customer service systems. |
| Village / Expansion | Steady sales and profits; additional layers of management required; expansion of operations; training and staffing become strategic issues; company takes on a life of its own. | Develop formal customer service programs, including feedback processes and information systems. |
| City / Maturity | Formal department systems for administration, production, and marketing; leaders spend more time on long term planning and strategy, instead of day-to-day activities. | Develop ongoing management and employee training programs; establish ongoing customer service/marketing programs; growth management planning. |
| Metropolis / Resolution | Long term surivival virtually assured; company seems to run itself. | Fine-tune adjustments to current administrative, production, and marketing systems; exploit opportunities for innovation and new product development (i.e., "research and development"). |

Source: Albrecht, 1994.

**Strategic Considerations**

Based on the previous discussion in this chapter, the strategic issues which face Producers of the Diamond Willow Range can be summarized as follows:

Strengths

- PDWR's members are generally highly motivated and committed overall to the long-term success of the company.
- The company has low overhead costs and a small membership base, which gives members relatively good flexibility in making financial/business decisions.
- The average profit margin of PDWR-sold beef is higher per pound than for conventionally sold beef. This is a strong motivation for members to find more customers for PDWR beef.

Weaknesses

- Shortage of volunteer labour to carry out administrative and marketing tasks.
- Members are learning new skills in marketing and customer service, but skill set is still relatively weak.
- In the past, customer service was handled by different members according to who was available at any one time. This has led to weak client relationships due to inconsistent representation and unfamiliarity.
- Animal tracking systems vary among members, which may lead to inconsistent results and "weak links" in the tracking chain. This may affect reliability and consistency of tracking

PDWR product backwards from the store shelf to the producer, especially if a customer identifies a problem.

- Some members are experiencing significantly higher production costs in adjusting to the organic production process, which in turn decreases profit margins for those members. If this continues to the point where profit is comparable to conventionally sold beef, then there may not be a financial incentive for those members to stay in PDWR.
- OCIA standards for livestock production are not as long established as those for crop standards. PDWR's early misunderstandings, confusion with guidelines, and conflicts with auditors during the first year of certification has made the certification process more difficult than PDWR members anticipated. Although this has been a weakness with the OCIA standard, PDWR members have learned from the experience, and future misunderstandings may be more easily avoided.
- Members' total current production capacity is relatively modest. It is unlikely that PDWR would be able fulfill the needs of a large customer such as Safeway or Calgary Co-op. Without new members, expansion could only occur if existing members can secure financing to buy more organic cattle from outside the group.

Opportunities

- Company Expansion: New members who produce organic beef would help to expand product capacity. This may also dilute the power of current members in PDWR, and more Board members may complicate the decision-making process at Board meetings.
- Company Diversification: New members who produce organic non-beef livestock would help to diversify PDWR's range of products, making PDWR the "one-stop" supplier of organic meat products. This would involve another learning phase for all members in

adjusting to and accommodating the unique requirements of marketing, processing, and distributing non-beef meat products. Again, additional members may complicate PDWR's decision-making process.

- Vertical Integration: New members who produce organic crops for cattle feed may help to stabilize prices and availability of organic feed for current beef-producing members. Crop-producing members could benefit from a guaranteed, stable demand base and from sharing the administrative costs of marketing excess feed to outside producers at attractive prices.
- Vertical Integration: New members from the feedlot and/or processing industries may help to improve the producer-processor relationship, leading to better service and customization for PDWR members. Processors would benefit from a stable demand for livestock processing. Also, through cooperation and collaboration as PDWR members, processors could become more expert at handling organic livestock, enabling them to market their services to non-members as specialists in organic processing at a premium price.
- PDWR could expand its operations to include slaughter, processing, and packaging. This vertical integration is expensive and resource-intensive, however it has the potential to boost profitability and give members more control over the end product to the consumer. It would be preferable to do this vertical integration through strategic alliance or expanded membership with current processors.

Threats

- PDWR's small production capacity and low economies of scale makes it vulnerable to outside suppliers, processors, and wholesale customers. These can have a negative impact on costs (of supplies, services, and in sales negotiations) and service levels.

## CHAPTER 7: COMPETITION / PRODUCT MARKETING ANALYSIS

The worldwide organic food industry is changing at a rapid pace, not only in terms of market growth, but also with regards to standards and regulations, consumer acceptance and awareness, and the establishment of industry groups. However, not all sectors of the organic agri-food industry are changing at the same pace. For example, crop agriculture has matured more quickly into a steady market. Livestock, on the other hand, still has relatively more growing pains to undergo before it becomes established as a stable industry.

### Competition

The primary organic beef producer which is PDWR's major competition in Calgary is T.K. Ranch, based in Coronation, Alberta. Colleen Biggs, marketing representative (and family member) for the ranch has been successful in building a strong, loyal customer base in Calgary, partly based on her numerous connections in the city, but mostly due to her persistence and skill at marketing. She is also an original member of the Earth to Table coalition (see Industry Groups below). In addition to producing organic beef, T.K. Ranch also runs a bed and breakfast at the ranch, and offers tours of its operations to customers who are interested in viewing the operations of an organic farm. Ms. Biggs also markets organic/natural products which are produced by nearby Alberta producers. These include dairy products, fruits, and vegetables. With regards to beef products, T.K. Ranch itself cannot supply all of its customers from its own operations. Instead, it commissions other local ranchers to also supply organic beef to its customers on a contract-by-contract basis (Biggs, 1998*a*). Thus, unlike PDWR, T.K. Ranch and its co-suppliers do not operate as a single incorporated entity. Co-suppliers are, however, screened by T.K.

Ranch to ensure that their production processes are harmonious with T.K.'s preferred "Holistic Resource Management" philosophy.

Based in Hudson Bay, Saskatchewan, the Canadian Organic Livestock Association [COLA] was established in 1997 as a producer group of approximately 30 members, whose mission is to help producers to market their organic beef (Neu, 1998*a*). The majority of members are in Saskatchewan, but several COLA members are also co-suppliers for T.K. Ranch, which also makes them competitors with PDWR. All COLA members are OCIA-certified (Neu, 1998*b*).

Part of the marketing success of these producers has been an energetic campaign to foster strong customer relationships and guarantee quality, quantity, and timeliness of supply (Earth to Table, 1999). Organizations such as Earth to Table (see below) and producers such as TK Ranch have been successful in building awareness of organic products, and touting it as an attractive alternative to conventional agricultural products (Genova, 1999).

Another niche competitor is the direct-to-home retailer. These companies sell organic foods to consumers via telephone and/or Internet ordering. Products are then delivered directly to the consumer's home. In Calgary, a company called Organic Express offers weekly baskets of produce which vary according to seasonal availability. Customers are given a limited option to modify these weekly baskets. In addition, Organic Express also offers processed/packaged foods such as nuts, pasta, beverages, spices, and grains; these are standard staples which are available throughout the year. Organic Express was started in 1998 by Rob Horricks, a former employee of a large Calgary health food store. After reviewing market statistics and analyzing market growth potential, Mr. Horricks opened Calgary's first direct-to-home organic retailer. Most of the products he sells are supplied through a Vancouver-based broker, and Organic Express prefers organic products which are produced under the California Certified Organic Farmers

Organization standard (Horricks, 2000). In the summer, Organic Express tries to buy more locally produced organic foods, but still relies heavily on brokered products. Due to logistical problems of transporting fresh/frozen meats, Organic Express does not currently retail any meat products to its customers (Horricks, 2000). In addition to offering incentive programs for customers to encourage friends and relatives to subscribe as new customers, Organic Express is also in the process of training its delivery people to enhance customer service levels through soliciting feedback from its current customers (Horricks, 2000). It is hoped that these measures will help Organic Express to better understand and keep its customers.

Other Canadian direct-to-home retailers competing in the organic industry include Organics To You (Vancouver), Faunus Herbs (Ontario), and Feast of Fields Vineyard (Ontario). Direct-to-home competitors in the organic beef market include North Hollow Farms (Vermont) and Emerald Isle Organic Farm (Indiana).

**Industry Groups**

The Canadian Organic Advisory Board [COAB] was established in 1992 to be "a national, non-profit advisory body to represent the interests of organic production and certification groups across Canada" (COAB, 1999). Its primary mission is to develop and promote a national standard for production of organic products, and to supervise a certification system for the standard (COAB, 1999). In addition, one of its major objectives is to "facilitate the continued growth and development of the Canadian organic sector, through leadership, communication, and knowledge" (COAB, 1999). Once it has completed its campaign to establish the national standard and its certification system, COAB may be able to devote more effort to expanding national and international markets for Canadian organic products, including beef.

The Organic Trade Association [OTA] is a large North American-based alliance of producers, processors, customers, suppliers, consumer groups, importers/exporters, and distributors in Canada, the U.S., and Mexico. Its mission is to represent the organic industry and to "promote organic products in the marketplace and to protect the integrity of organic standards" (OTA, 1999). OTA was founded in 1984 and is perhaps the most sophisticated and powerful of the organic industry groups. The OTA is active in compiling statistics on the organic industry, publishing various documents on trade, production, and distribution of organic products, organizing organic food theme events, and acting as an advisor/representative in the media on organic issues. Within its organization, the OTA also runs several councils and committees which were set up to tackle industry-specific issues such as quality assurance, international trade, and certification (OTA, 1999).

Closer to home, Earth to Table is an informal group of "naturally responsible producers, awareness-oriented distributors, and quality concerned chefs" (Adams, 1999), based primarily in the local Calgary area. Its mandate is to enlighten the consumer and strengthen understanding and support for locally and naturally grown products by uniting growers, producers, distributors, contributors, chefs, and consumers. Its emphasis is on food which is local, fresh, seasonal, and natural (Adams, 1999). Its members include dairy, beef, fruit, and vegetable producers, as well as several high-profile chefs from Calgary restaurants. Earth to Table is currently focussed on developing the bond between producers and chefs in Calgary, but at a recent meeting, members also expressed a strong need to educate the end consumer about the advantages of local natural products. Each year during the fall, the group hosts a special event, held at a Calgary restaurant, to feature Earth to Table producers and the foods that they supply.

Elsewhere in Canada, Island Chefs Cooperative (British Columbia), Forks and Knives (Ontario), and Cuisine Canada (Ontario) are three other non-profit groups with similar mandates as Earth to Table (Earth to Table, 1999). In each of these cases, local cooperation between mutually dependent groups (chefs and producers) has created small but thriving pockets of strong commitment to organic/natural foods (Genova, 1999).

Cooperative-style alliances such as Earth to Table possess several competitive advantages for members. The sharing of information among producers, suppliers, and retailers generates synergies which can include the following (Albrecht, 1994: 247):

- Access to untapped markets. The cooperative is encouraged to explore opportunities which may have been otherwise infeasible for individual members.
- Learn and develop innovative technology and/or processes. When barriers are broken down between suppliers, producers, and retailers, members may be able to start thinking "outside the box" when it comes to problem-solving. Innovations may include adapting technologies from one industry sector to another, streamlining distribution processes, or customizing processes for economic savings.
- Develop global-mindedness in developing, producing, and marketing products.
- Develop joint technologies. Shared expertise is invaluable in developing new customised technology which can improve business processes.
- Joint marketing. Not only does this include cost sharing, but joint efforts may also yield additional synergistic value for consumers in the form of improved service or lower prices.

Indeed, including suppliers as partners to an enterprise is key to "building competitive advantage and adding to the agility of the enterprise", and allows suppliers to stay lean and innovative, and contribute to product development (Dimanescu & Dwenger, 1996: 152).

Japanese businesses started practicing this in the 1950's with successful results (Dimanescu & Dwenger, 1996: 153). In order for such an alliance to succeed, all parties must ensure open communication, practice strong coordination efforts, and work under competent guidance. Ideally, an alliance will help to spread risk, delegate complex administration, reduce investment and overhead costs, and allow members to focus on high value-added activities (Dimanescu & Dwenger, 1996: 156).

**Product Marketing**

In spite of the strength of the organic foods market, there is still a "surprising lack of research on a wide variety of organic agriculture topics" (Welsh, 1999). In particular, industry experts acknowledge that there is a need for more research on marketing-related issues such as co-operative marketing strategies, price reporting services, consumer demand, marketing systems, and value-added markets (Welsh, 1999). Without more research, most organic food producers and businesses will lack the information, expertise, and capital required to market organic products to their maximum advantage (Richman, 1999). As a result, observers have noted that many industry producers are choosing not to invest time and capital to do their marketing job properly (Richman, 1999).

This laissez faire approach to marketing efforts will cost producers in the long run. Increasingly, as more producers, retailers, and food processors enter the market, long-term business survival will depend on – among other business-related processes -- well-researched and aggressive marketing strategies. For example, recent studies on the science of shopping have suggested that "an important medium for transmitting messages and closing sales is now the store and the aisle" (Underhill, 1999: 32). This is especially important in an environment where

consumers are bombarded with excess messages from media advertising and where companies, in an "over-retailed" environment, seem to be spending more marketing effort in stealing customers from their competitors rather than in developing new customers (Underhill, 1999: 32). This has contributed to an overall trend of weak customer loyalty and erosion of product branding (Underhill, 1999: 32).

A product "brand" is defined as "a distinguishing name and/or symbol intended to identify the goods or services of either one seller or a group of sellers, and to differentiate those goods or services from those of competitors" (Aaker, 1991: 7). One of the advantages of a successful brand management strategy is that producers can charge higher price premiums for their products, and consumers will be more loyal to those products (Aaker, 1991: 22). Indeed, if a product's attributes are consistent with the brand image, then higher prices can act as a quality cue to customers (Aaker, 1991: 99, 224). Product quality is unarguably one of the most important factors in building a successful brand image. For example, when cases of Perrier water became contaminated with high levels of benzene, the brand's quality image was tarnished, and Perrier permanently lost a significant share of their market when once-loyal consumers tried competitor brands and never returned to the Perrier label (Aaker, 1991: 42). Similarly, Schlitz Beer's brand image suffered in the mid-1970's when consumers perceived that the taste and quality of the beer would worsen as a result of various changes in production practices (Aaker, 1991: 83). On the other hand, in the early 1980's, after conducting a market research survey of health-conscious consumers, Weight Watchers carried out several modifications designed to reinforce its products' associations with health and nutrition, two themes that were found to be important to consumers. These included improving product taste and health qualities, creating uplifting and positive advertising messages, designing classier packaging materials, and softening the portrayal of Weight Watchers consumers from "hard core" dieters to "healthy lifestyle"

diners who enjoy good food (Aaker, 1991: 104). The campaign worked, and Weight Watchers has since become the dominant player in the packaged health foods sector (Aaker, 1991: 104).

These are strong reasons for why organic producers in general (and PDWR in particular) must improve their marketing research efforts and seek to understand their target customers in terms of what they need, want, and prefer in a product, and how they want to access the product (Albrecht, 1994: 93; Cook, 1992: 12). Profiling customers and segmenting their target market is not enough; producers must act on their research with strategies which seek to develop bonds between producers and consumers, including steps which will: promote awareness of the product; build a product identity which parallels customer values and emotions; nurture a producer-consumer relationship based on two-way dialogue; encourage community-based interaction among consumers and producers; and ultimately, foster customers as advocates for the product through word-of-mouth recommendations (Cross & Smith, 1995: 56).

In essence, a strategy which includes these tactics seeks to achieve the holy grail of product marketing: customer loyalty. According to Griffin, customer loyalty is "purchase behaviour defined as non-random purchases expressed over time" (Griffin, 1995: 4). For producers, the strongest and most preferred form of customer loyalty is when a consumer has a strong preference for a product/brand which has a high degree of differentiation from its competition; this can be succinctly expressed as "I really want this attribute, and I can't find it anywhere else" (Griffin, 1995: 21). Building loyalty requires companies to "emphasize the value of its products or services and to show that it is interested in building a relationship with the customer", thus "its business is to build a stable customer base rather than make a single sale" (Griffin, 1995: 9).

In a case study of Frieda's Finest, a fresh fruit and vegetable supplier based in California, Griffin (1995: 29) highlighted the tactics which helped the company to attain the status of

preferred supplier for many of its customers. These included adding value to the produce by providing extras that make their produce stand out from everyone else's, offering explanatory labels that describe how the product can be used, publishing a free newsletter, and encouraging chefs and restaurants to use free recipes which feature their produce (Griffin, 1995: 29). Another tactic that may be useful -- especially for introducing organic beef to a new market -- is an aggressive, well-funded, and well-supported effort to give free samples. In fact, one study has suggested that 90% of new grocery products fail, not because people didn't like the products, but because they didn't try them (Underhill, 1999: 163). Indeed, it seems that touch and trial are becoming more important for consumers for two major reasons. First, grocery store managers and staff are often not knowledgeable about the products that they stock (Underhill, 1999: 165), and second, because consumers have become increasingly skeptical of advertising, and need to touch, smell, and taste the product before they are convinced of product claims and/or quality (Underhill, 1999: 166)

Tactics such as these require an immense amount of effort and persistence. Customer service in a marketing strategy must be first-rate and various experts have stressed that people with the right customer service attitude is the most important part of the equation to building a solid customer loyalty program (Griffin, 1995: 220; Albrecht, 1994; Cooper, 1993: 58, 77; Debelak, 1992: 47). Indeed, two of the top reasons for business failure are inadequate marketing research and poor customer service (Albrecht, 1994: Chapter 9; Underhill, 1999: 163; Cooper, 1993: 20, 25-26; Debelak, 1992: 257). A successful customer service program will emphasize reliability (carrying through on promises), assurance (fostering trust and confidence), tangibles (appearance), empathy (caring and attention), and responsiveness (promptness and willingness to serve) (Griffin, 1995: 119). Another important factor in developing a business relationship with customers is the producer's ability to sell him/herself before trying to sell the product (Debelak,

1992: 45). This requires the ability to be appreciative of customers concerns, perseverance, openness to suggestions, and coping well with problems (Debelak, 1992: 47).

Although carrying through on these principles will help a producer to capture and maintain customers, organic producers face unique barriers to entry when it comes to marketing their products to mainstream grocery outlets. The most obvious of these barriers is that large chain supermarkets tend to be closed or severely restricted to small, local producers. Often, these markets require huge volumes of product on a consistent basis, which most organic producers find impossible to fulfil (Debelak, 1992: 84).

Another barrier is that large grocery stores offer many similar products which compete directly with organic products; namely, conventionally grown produce and conventionally raised beef. As a result, grocery mangers may be reluctant to add organic products to their store shelves if they feel that they already offer enough variety to the consumer (Debelak, 1992: 85).

A third barrier is that major players in the food industry tend to control their respective markets (Debelak, 1992: 85). This is especially true in the beef industry in Canada, where suppliers such as XL Beef and Cargill Foods often impose restrictive clauses in supply contracts with supermarkets, thus forbidding supermarket purchasers from stocking shelves with beef from any other competing suppliers of fresh/frozen beef products (Berg, et. al., 1995).

Alternatively, e-commerce – Internet-based marketing and sales – has several advantages for organic food producers. First, it is relatively inexpensive compared to opening shops, face-to-face selling (which can involve considerable travel expenses), and selling through expensive middlemen. For organic producers, the majority of whom operate on a small scale, these represent significant cost savings.

Second, for producers who offer a variety of products, there are no "floor space" limitations when it comes to displaying their product selections on a website (Underhill, 1999: 215). Similarly, producers have ample room to provide potential customers with a generous amount of well-organized information on their products which customers can read at their leisure. This is in contrast to in-store displays/brochures on shelves, which, more often than not, suffer from lack of shelf space (thus getting pushed to one side where customers overlook them), deteriorate into messy piles from clumsy fingers (causing a nuisance for store managers and customers alike), or are ignored by customers who are too rushed to take the time to stop and read new material while doing their shopping.

For consumers who normally shop at conventional large grocery chains, the advantage of buying organic through direct-to-home retailers is that it saves shoppers an extra trip to specialty food stores, thus offering convenient and speedy access to a specialty product. The disadvantage is the cost of delivery, high prices, and limited flexibility to choose produce. Although companies such as Organic Express may offer a refund or substitution policy for items from their weekly baskets (e.g. for rotten/damaged fruit), undoubtedly the process is time-consuming and a hassle. When the consumer handpicks her own fresh fruit and vegetables at the grocery store, there is much less risk of consumer dissatisfaction with the product.

In general, the internet is an ideal marketing tool for products where sensory perceptions are not important in the purchasing decision, such as books, tickets, commodities, etc. (Underhill, 1999: 216), or in cases where the consumer has already made a decision to buy the product (Underhill, 1999: 219). It is also a valuable tool for providing information on a company, its products, and upcoming promotional events. Conversely, it can also allow consumers to communicate with the company by allowing them to provide product feedback, including

complaints, questions, and praise (Underhill, 1999: 219). However, products which rely heavily on sensory perceptions (such as food, clothing, art, etc.) will tend to reach a very limited market.

This is why organic producers should continue to try to reach the bulk of their market through retail shops. The successful store experience offers sensory stimuli, immediate purchase gratification, and social interaction (Underhill, 1999: 217). For these reasons, shop selling -- although more expensive, time-consuming, and difficult -- offers the greatest potential for maximizing market reach.

Some experts argue that marketing organic products must be approached differently from conventionally-produced foods, and point to businesses which have adopted product diversification, expanded product lines, and aggressive consumer education as key strategies for marketing success (Richman, 1999). In North America, the next few years may prove to be an interesting case study of the maturation of a niche market comprised of a few philosophy-driven small-scale producers, into a significant market sector which may end up being dominated by multinationals and large-scale farming. Although planning and research are critical for long-term success, industry observers also note that producers need to be quick and decisive in order to keep pace with competitors and grow with the industry (Richman, 1999).

For producers, a major part of the appeal of the organic foods market is the attractive price premium that organic foods currently enjoy. From 1995 to 1997, prices for organic corn were listed as high as 73% above conventionally grown corn (Welsh, 1999). Soybeans in the same time period have been sold at twice the price of conventionally grown soybeans (Welsh, 1999). And in the EVDS survey results, Calgary consumers noted that they would be willing to pay up to 50% more for organic beef (Berg, et. al., 1995).

One potentially exciting segment of the market is the "aging Boomer" generation. Several experts have profiled the typical Boomer (aged roughly between 40 - 55 years old) as having more disposable income and being more likely to consider the health implications of the foods and lifestyles they choose (Foot, 1998: 125-126). This is particularly important for Boomers who wish to maintain good health and independence as they enter into retirement (Ostroff, 1989: 78). In addition to healthiness and quality of food, Boomers prefer smaller meal portions, primarily due to fewer calories required as people grow older (Foot, 1998: 125-126; Ostroff, 1989: 78; Menchin, 1989: 137). And finally, with their gourmet appetites and fast food schedules, Boomers demand foods which are conveniently accessible, and fast and easy to prepare (Menchin, 1989: 137; Foot, 1998: 125-126; Ostroff, 1989: 78). This may include frozen, microwaveable, and packaged foods which are sold as "full meal" products. In terms of quality, these products must rival restaurant (or even homemade) fare, but should be priced in a range between regular grocery products and restaurant items.

As the Boomer market ages, package design will become more critical. Bright colours (for visual distinctiveness), larger print sizes, bold display of features (i.e., "organic", "low cholesterol", "low salt", etc.), and clean simple design will prove to be user-friendly features for the mature consumer (Menchin, 1989: 140).

For organic producers, the aging market presents a desirable market segment because its constituents demonstrate buying patterns which suggest a high propensity for long-term brand loyalty. Since these consumers care more about certain product attributes (such as quality, nutrition, convenience) which can be more difficult to offer on a consistent basis, if a producer can achieve consumer satisfaction on these levels, then it will become almost impossible for competitors to steal your market share (Griffin, 1995: 6-7). This is in contrast to price-conscious shoppers who are notoriously fickle and un-loyal to any one brand.

With regards to the domestic market, the major challenge for many small-scale organic beef producers is breaking into the mainstream market by selling products through large supermarket chains. Most consumers are not willing to change shopping venues or add new venues (i.e., specialty stores or meat shops) to their regular grocery shopping routines (Richman, 1999). Therefore, producers must gain access to consumers through mainstream supermarkets. Currently, up to 80% of all organic food producers sell their products through wholesalers (Welsh, 1999).

Exporting to overseas markets entails additional unique marketing challenges, especially in terms of building relationships with customers over long distances, and in catering to foreign consumers whose tastes and preferences may be markedly different from their North American counterparts. Nevertheless, based on current demand projections in Europe (and to a lesser extent Japan), organic producers who wish to grow with the industry would be wise to build long term plans for exporting to these lucrative markets.

In addition to conducting solid market research to understand consumers' needs, exporters must also understand the culture of the importing country. This is especially important for building a successful business relationship with buyers. Differences in social systems, customs, manners, legal systems, and business procedures can be a minefield of potential marketing disasters (Sletten, 1994). This is why experts strongly recommend that exporters consult with professionals whose specialty is to assist companies who wish to enter new foreign markets. Another popular tactic is to find foreign nationals as business partners. These may include sales agents (foreign-based individuals who market and sell on your behalf for a fee or commission), distributors (foreign-based individuals who buy your product and then turn around and sell the product at their own price, on their own terms), trading houses (Canadian-based brokers who act

as intermediaries between seller and buyer), and partnership agreements (strategic alliances with companies who will co-market your products alongside their own) (Curran & Kautz, 1994; Sletten, 1994). Each of these methods has advantages and disadvantages, and exporters must weigh their relative merits in terms of costs, control over product marketing, ease and speed of market entry, and flexibility to expand market presence in the long term.

No matter which export strategy a company uses, experts agree that would-be exporters must do research by investing in personal visits to the import country (Curran & Kautz, 1994; DeRouffignac, 1990; Sletten, 1994). There is no substitute for face-to-face appointments with prospective business partners, and occasional follow-up visits to strengthen business relationships (DeRouffignac, 1990). Country visits are also good opportunities to seek trade support with Canadian embassies or consulates. These offices can offer valuable information on documentation/contract requirements, local markets, merchants, and financial institutions (Curran & Kautz, 1994).

In considering exports to Europe, there are several marketing trends and consumer demand characteristics which organic producers should know when developing a marketing/export strategy for their products. First, large retailers have been increasingly buying directly from manufacturers and producers, thus eliminating wholesalers in many transactions (DeRouffignac, 1990: 128). This is especially true in the consumer goods market, where uniform product coding, computerized pricing systems, and direct computer links have allowed manufacturers to automatically monitor stock levels at each of their customers' outlets on a daily basis, and respond with new deliveries accordingly (DeRouffignac, 1990: 129). Admittedly, there has been less of an impact on the fresh fruit, vegetables, flowers, and meat wholesalers' operations (DeRouffignac, 1990: 129), but producers of pre-packaged and processed foods may find an

opportunity to foster direct relationships with large retailers as computerization in the grocery industry progresses.

European consumers also seem to favour specialty foods which feature strong national characteristics (DeRouffignac, 1990: 134). For example, the British Christmas Pudding is considered to be a rare luxury in France (DeRouffignac, 1990: 134). Similarly, local organic beef producers might be successful in marketing "Canada Organic Beef" or "Alberta Organic Beef", and by capitalizing on an image of Canada as a clean, wide-open, and natural source of healthy food products.

In order to distinguish itself in a large and diverse marketplace such as the European Union, experts note that innovation and a successful branding strategy will help to bring new products to consumers' attention (DeRouffignac, 1990: 134). For organic beef producers, this means that offering a high quality steak might not be enough to succeed in the European market, and producers may need to develop unique qualities around their products. These might include, for example, ultra-convenient packaging, portion sizes, or meal preparation directions, eco-packaging and eco-labelling, a complementary line of products, brand imaging (e.g., "Canadian", "Alberta Foothills", "Rocky Mountains", etc.), or special dietary packages.

**Strategic Considerations**

Based on the previous discussion in this chapter, the strategic issues related to marketing organic beef products can be summarized as follows:

Opportunities

- The growth of industry groups (producer associations, producer-consumer collaborations, advisory boards) means that organic producers now have an unprecedented number of resources for advice and support on issues ranging from on-farm production methods to international export rules.
- European consumers want unique products which are conveniently packaged and quick and easy to prepare.
- Export markets may begin to open up to Canadian beef exports as trade barriers drop and certification standards become accepted.
- Organic foods can be marketed to appeal to certain attractive niche markets.

Threats

- As the organic industry grows, there will be more competition in the local and international markets. Furthermore, competitors will inevitably become more sophisticated in terms of economic efficiencies, business expertise and product marketing. In order to maintain its position in the market, PDWR must keep up with -- or, preferably, outperform -- its competitors on all of these fronts.
- Protectionism and/or trade barriers might not be eliminated from large overseas markets for several more years, based on ongoing political pressures.

## CHAPTER 8: STRATEGY RECOMMENDATIONS

### Assumptions

In order to achieve economic sustainability, PDWR's success will depend on its ability to realize a satisfactory return on investment over the long term. This must be done within the context of its stated mission, which also includes ecological sustainability. Nevertheless, profit is, simply put, a function of revenues less costs. This is true of every commercial enterprise. Therefore, a business strategy at its most basic level is a plan which seeks to maximize revenues and minimize costs. Based on the issues identified in previous discussions on strategic considerations, there are several tactics that PDWR can adopt to achieve these two aims.

**Strategy #1: Designate a full-time, professional marketing representative.**

**Benefits**

This strategy will help to solve the shortage of volunteer labour from within PDWR to assist in the responsibilities of marketing the company and the product. It also solves the issue of marketing and promotional inexperience of the volunteers. During the start-up phase of PDWR, it was sufficient to build up the organization based on volunteer help from the family members from each ranch. At the time, there were no large local competitors. Now, however, PDWR faces competition from large producer groups whose representatives are extremely aggressive in marketing their products. Currently, in addition to his administrative and accounting duties, the General Manager has also been responsible for the bulk of marketing efforts. In order to further enhance the marketing program, PDWR would benefit from a full-time marketing manager who can concentrate solely on coordinating product development and promotional, advertising, and sales efforts with the various provincial brokers. If successful, this strategy will result in increased revenues for PDWR.

**Cost/Risk of Implementation**

The cost of this strategy will be the salary and/or commission required for the new position. This is an upfront investment that may take several months to begin to pay itself back. This "lag time" will consist of training time for the new salesperson and may also include seasonal delays due to customers' contract requirements (for example, some purchasers for larger retail outlets might only consider new suppliers at one time during the year). In addition to the compensation cost, there will also be the attendant costs of Employment Insurance and Canada Pension Plan payments which PDWR will be responsible for. It is highly recommended that PDWR opt for commission-based compensation because it requires minimal new funding.

In order to minimize the risk of hiring a potentially unsuitable candidate, PDWR should consider hiring initially as a part-time position, and to later expand the function to a full-time position. This tactic also serves to further minimize initial costs for PDWR.

**Cost/Risk of Non-Implementation**

PDWR risks losing new and existing customers if it cannot provide timely, top-notch service to its customers. Furthermore, the growing number of new producers means that PDWR must begin to position itself to compete effectively in a larger arena of potentially sophisticated competitors.

**Implementation Schedule**

Implementation should begin in the short term, preferably immediately.

**Action Plan**

Once the Marketing Manager is hired, the major tactics required to carry out the remainder of this strategy include the following:

- Focus on building long-term customer relationships based on trust, reliability, product customization, and understanding customer needs.
- Establish a dependable and responsive communication/feedback process between PDWR, brokers, and customers. PDWR must demonstrate its willingness to respond quickly and effectively. This must also include regular site visits.
- Network with other organic producers and producer groups in a cooperative effort to build the market for organic products in general and PDWR beef in particular.
- Take an innovative, proactive approach in demonstrating to customers the benefits of purchasing local products which are produced in a sustainable manner. This may include organizing and participating in food demonstrations at promotional events, providing "full

package" solutions for customers who are unfamiliar with organic products, and assisting customers in storage, presentation, and on-site marketing of PDWR products.

- Build awareness of organic foods with future chefs by sponsoring and/or participating with chef training programs at institutions such as Southern/Northern Alberta Institutes of Technology.
- Designate the marketer to supervise the development and implementation of a website for marketing to potential long-distance customers from across the continent and overseas. This website may start out as a simple, information-only service. However, PDWR should seek to expand the site's operations as soon as possible, to include true e-commerce functions such as taking custom orders and electronic payments. In order to establish this e-commerce feature, the marketer must first develop the infrastructure to facilitate timely processing, delivery, and feedback/quality assurance issues with Internet customers. Products for this market should be designed with the following considerations: ease and cost of transport; customer food preparation requirements; packaging safety/integrity; and international export requirements.
- Spend money on the best. Retailers, wholesalers, chefs, and other food industry customers are accustomed to dealing with established, professional sellers and brokers from the conventional beef industry. At a time when the Canadian organic industry is growing and establishing itself as something more than a "fringe" market, it is important to demonstrate a similarly professional, knowledgeable image.

**Critical Success Factors**

In order to measure its success with this strategy and to adjust tactics accordingly, the following critical success factors should be measured and monitored:

- Measure positive feedback from customers and brokers on satisfaction with product, delivery, and resale success. Remedy issues that result in negative feedback from customers.

- **Monitor sales volume and longevity of local customer relationships.**

**Strategy #2: Take advantage of new networking opportunities.**

**Benefits**

The aim of this strategy is to build alliances with other beef producers and local non-beef organic producers. These alliances should allow PDWR to collaborate, share information, and receive marketing and production support from other producers who have a stake in the long-term growth of the organic industry. Unlike a strictly competitive approach to marketing, where producers vie for the largest slice of the current market "pie", this collaborative approach seeks to "expand the pie" for all producers. If successful, networking with organic beef and non-beef producers may yield new creative ways for PDWR to market and/or produce its product more effectively and efficiently. Therefore, this strategy should result in increased revenues and greater economic efficiencies.

One avenue that PDWR could pursue is an alliance with non-beef producers with whom PDWR can develop a "family" of products with a common theme beyond organic certification. For example, local organic fruit, vegetable, or grain growers could join forces with PDWR to market an "Alberta" theme around a specific group of products. Alternatively, the theme may be "Southern Alberta", or "Pincher Creek", or even "Diamond Willow Family". Creating a theme around products is the first step to branding and image development.

**Cost/Risk of Implementation**

The cost of pursuing this strategy is the time and effort required to network and collaborate with other producers. In particular, if PDWR adopts Strategy #1 described above, the Marketing Manager will be the ideal candidate to initiate and foster contact between PDWR members and other producers. If Strategy #1 is not adopted, then the General Manager may be best suited to coordinate this strategy. Therefore, both the Marketing Manager /General Manager and PDWR

members will need to allocate time and resources for such collaborations. Joining producer/marketing associations may also entail costs of membership fees.

By entering into alliances with competitors and other outside organizations, PDWR risks spoiling its image and/or reputation if it chooses disreputable business partners. Similarly, if a business partner undermines or reneges on agreements for its own benefit at PDWR's expense, then PDWR risks spending valuable time and effort for no benefits. PDWR must be extremely careful to choose honest, trustworthy, as well as astute business partners.

**Cost/Risk of Non-Implementation**

PDWR risks losing potential new market segments to innovative competitors and opportunities to improve economic and/or marketing efficiencies. As an alternative, PDWR may opt to continue to consult with non-producer experts from academia (such as the University of Calgary, University of Lethbridge, and Olds College), government (such as Alberta Agriculture and Agriculture and Agri-Food Canada), and industry groups regarding issues such as production efficiencies and marketing theory. However, these may prove to be weak sources of inspiration when it comes to real-life synergistic benefits and opportunities with potential marketing partners.

**Implementation Schedule**

Implementation should begin in the short term, preferably immediately.

**Action Plan**

The major tactics required to carry out this strategy include the following:

- Contact local organic beef competitors to initiate a dialogue on the possibility of pooling resources and/or product to market organic beef to large target customers (such as

mainstream grocery chains). Foster relationships based on openness, trust, and a shared interest in expanding the market for all local organic beef producers.

- Contact local non-beef organic producers to initiate exchange of information on the organic industry in general. These relationships should seek to improve the awareness of all parties about marketing opportunities and identify marketing/marketing synergies among producers. For example, a processor of organic prepared condiments (such as mustard, ketchup, etc.) may be an ideal marketing partner for PDWR beef.
- Attend organic trade shows and conventions. These are prime sites for learning about and initiating contact with other producers.

**Critical Success Factors**

The following critical success factors should be measured and monitored:

- Revenues which result from direct and indirect leads from strategic partners.
- Economic savings from production efficiencies gained from applying shared information from strategic partnerships.
- Measure positive feedback from customers regarding success of marketing promotions. Remedy issues that result in negative feedback from customers.

**Strategy #3: Adopt a sustainable agriculture audit program as a production requirement for PDWR beef.**

**Benefits**

The primary benefit of this strategy is anticipated economic/production efficiencies from long-term sustainable agricultural practices. Secondarily, by going over and above organic certification requirements, PDWR may be able to leverage its production practices to position its product as distinct from its competitors. Under the Marketing Manager (from Strategy #1) or, alternatively, the General Manager (if Strategy #1 is not adopted), this product characteristic may become a valuable marketing angle, especially as more organic beef producers come online in the marketplace over the long run.

**Cost/Risk of Implementation**

Just as organic certification entailed initial production-related costs, time, resources, and audit fees, sustainability audits will also required similar costs. This is why PDWR should view this strategy as a long-term project, since resources are already tight for members and the corporation.

In addition, it may be prudent for PDWR to take a "wait and see" approach, to allow the science of ecosystem management to establish a body of tried and true principles for producers. It is true that no matter how advanced the science may get, producers will always be, to some extent, pioneers when it comes to new agricultural production techniques, and the area of sustainable agriculture is still a largely uncertain domain. Nevertheless, it may be useful for PDWR to let others make a few mistakes before jumping on the new bandwagon.

Furthermore, it is likely that it will take several seasons before significant cost efficiencies and stabilization will be realized, thus members should only undertake this if it will not significantly affect their cash flow requirements. Also, since sustainable development seems to be a relatively minor issue with consumers at the moment, this strategy should be implemented as a long-term project.

**Cost/Risk of Non-Implementation**

PDWR does not stand to risk losing current or future customers who are specifically interested only in organic beef, however, it does risk losing potential market share of a new target market of customers who would be interested in organic beef which goes "over and above" organic certification. Currently, there is very little indication that such a target market exists now, at least not significantly. However, as consumers become more knowledgeable about organic agriculture, especially within the larger context of sustainable agriculture principles, there is an opportunity for producers to further enhance product choices by offering organic and "sustainably-produced" products. If competitors exploit this opportunity first, then PDWR risks losing market leadership if it decides to enter this area later.

**Implementation Schedule**

Implementation should begin within the medium term (2 to 5 years).

**Action Plan**

The major tactics required to carry out this strategy include the following:

- Choose a sustainable agriculture audit program. PDWR members must decide on criteria which will determine the "best fit" program. These criteria may include production feasibility, production costs, audit fees, potential appeal to consumers, marketing support

(i.e., labels, promotion, high profile sponsors), and how respected the program is with other producers.

- Implement production changes to comply with audit program. Based on PDWR's resources, it may be desirable (or required) to track members' progress through a centralized information system, to allow PDWR to measure quality control among all producers.

**Critical Success Factors**

The following critical success factors should be measured and monitored:

- Production cost efficiencies.
- Landscape productivity.
- Consumer feedback regarding the importance of sustainability when purchasing PDWR beef (i.e., Is this increasingly seen as a positive, negative, or important product characteristic?).

**Strategy #4: Pursue organic certification under CAN/CGSB-32.310.**

**Benefits**

Currently, the Canadian organic market is relatively undeveloped, especially compared to the European and Japanese markets. Product labelling for organic foods is not regulated, which means that anyone can put the word "organic" on a product without having to prove its claim. The new national standard, if aggressively promoted and enforced, will help to boost consumer recognition and confidence in products which earn the label "Canada Organic". Thus, in order to take advantage of this marketing opportunity, PDWR should also pursue certification with the national standard *in addition to* its current and ongoing certification with the OCIA standard.

In addition, it is very likely that "Canada Organic" beef will be much easier to export to international markets. Given certification under ISO audit guidelines and aggressive promotion by producers and government departments, Canadian organic beef may finally pass into the huge European market.

Certification under the national standard will allow PDWR to benefit from the "Canada Organic" label, including positive recognition by Canadian consumers and international acceptance in overseas markets. This will have a direct positive impact on revenue.

**Cost/Risk of Implementation**

The major costs of this strategy are related to changes in production practices (since the national standard was designed to harmonize with many existing organic standards, these changes are not expected to be exceptionally onerous), certification/audit fees, and time and resources required to learn the new standards. In addition, PDWR's current marketing materials

may need to be updated to reflect the new system of certification. These include the PDWR handout brochure (see "Appendix B"), promotional kit, and any future website advertising.

If the national standard is not promoted properly nationally or internationally, then the standard might not be as powerful a marketing tool as proponents expect, thus PDWR would have wasted its time and effort in gaining certification. In order to avoid this risk, it is recommended that PDWR take a "wait and see" attitude, and observe the results of other organic producers with the national standard. Although PDWR may risk losing initial market share to more adventurous competitors, this prudent approach is warranted, given the delays, uncertainty, and frustrations which COAB has experienced in developing the certification process.

**Cost/Risk of Non-Implementation**

PDWR risks forfeiting the European Union market if it does not secure national standard certification. If OCIA is successful in gaining European Union approval for its certification process, then PDWR may still be able to enter this lucrative market. However, if the national standard is promoted successfully, then PDWR may still face a marketing disadvantage if "Canada Organic" products are deemed to be more desirable than "OCIA Certified Organic" products. At worst, PDWR risks losing market share.

**Implementation Schedule**

The decision to implement should be made within a year after COAB and its partners have finalized the certification process for the new standard. COAB had initially expected to have the process in place by late 1999, but to date this has not yet been accomplished. However, since PDWR is also a member of COAB, directors can effectively monitor progress on completion of the certification process. PDWR should assess the marketing success and consumer response (nationally and internationally) to "Canada Organic" products.

**Action Plan**

The major tactics required to carry out this strategy -- if the decision is to pursue certification -- include the following:

- Modify production processes to comply with the national standard.
- Undergo and successfully complete audit and earn certification.
- Actively promote PDWR beef as "Canada Organic" through local marketing campaigns and publicity.
- Assign resources to develop a long-term export campaign for overseas sales. A feasibility assessment may be required to determine if PDWR should make a strategic alliance with other Albertan/Canadian producers, strictly for the purposes of pursuing overseas customers. This tactic may be desirable if alliance partners can contribute expertise, extra production capacity, or customer goodwill (i.e., brand recognition, established contacts, etc.) to the partnership.
- Production changes and application to national organic standard should begin in the short term, preferably immediately.
- Development of an international export campaign should be planned for the medium- to long-term, depending on PDWR's production capacity.

**Critical Success Factors**

The following critical success factors should be measured and monitored:

- Solicit feedback from customers (retailers) regarding consumer acceptance and recognition of the "Canada Organic" label. During promotional events, solicit feedback from consumers regarding recognition of the organic label. Modify marketing campaign as required to remedy gaps in consumer knowledge.
- Monitor sales volume and longevity of international customer relationships.

**Strategy #5: Expand PDWR membership.**

**Benefits**

By adding new members from the supply, processing, distribution, and wholesale/retail sectors, PDWR becomes a vertically integrated company. The expected benefit of this arrangement is that PDWR ranchers in alliance with its partners can more efficiently and effectively produce, market, and distribute their product to the end consumer through greater control over costs and processes. This is especially important for a relatively small producer group which needs to conform to specific organic standards.

Suppliers of organic grain, hay, and other inputs could be extremely valuable members if the partnership allows ranchers to obtain favourable pricing and/or stabilized access to inputs. For the suppliers, membership may be beneficial to them if ranch members guarantee to buy a minimum amount of their product at a set price for a set period of time. For both parties, this helps to reduce uncertainty of prices, availability of supply, and seasonal sales. By reducing uncertainties, both parties are better able to plan their business strategies for the short, medium, and perhaps even the long term.

The same reasoning applies with processors, distributors, and wholesalers/retailers. By collaborating as members with a common stake in selling PDWR beef, synergies from within the group will start to develop, resulting in economic efficiencies and increased revenues.

Finally, as PDWR becomes more successful, it may be desirable to expand production capacity by accepting more ranchers into the corporation. The benefit of this approach to expanding capacity (the alternative would be to buy more cattle) is that it requires no financing

on PDWR's part, and it does not potentially compromise PDWR's current landscape production capacity.

**Cost/Risk of Implementation**

One risk with this strategy is that new members on the board of directors might negatively affect the board's ability to make decisions. Consensus will be more difficult to achieve, competing interests and/or lack of understanding of each other's business priorities may cause friction, discussions may become more involved and delay decision-making, and business issues become more complex, possibly taxing members' ability to make sound judgements.

This issue could be resolved by designating membership "classes", similar to shareholder classes, i.e., common shares, preferred "A", preferred "B", etc. For example, original PDWR members could be classed as having full voting rights and a guaranteed seat on the Board of Directors. New members from certain sectors may be given fewer voting rights and limited representation on the Board of Directors. This kind of arrangement would help to maintain original members' control of the direction of the company, and put an upper limit on the size of the Board. The disadvantage with discriminating between members' participation rights is that it designates a group of members as "second class", and may discourage potential members from joining and/or foster resentment between "first class" and "second class" members. One way to avoid the "class conflict" would be to offer full participation membership after a designated period of time (2 years, for example), similar to a probationary period system. This tactic would also help to encourage new members to view their participation in PDWR as a long term commitment.

Another risk is less flexibility in shopping around for suppliers who might offer better prices, quality of product, or level of service. By opting for guarantees as described above, PDWR members may be forfeiting some of their autonomy and freedom of choice.

**Cost/Risk of Non-Implementation**

PDWR risks becoming a "small fish in a big pond" if it is unable to keep up with competitors which are growing in number and size. This will begin to adversely affect PDWR's profitability if prices moderate as a result of large producers improving cost efficiencies and economies of scale. Furthermore, PDWR risks being unable to secure a stable, reasonably-priced supply of additional organic cattle from independent outside producers, especially if those sources negotiate strategic alliances with other larger producer groups.

**Implementation Schedule**

Implementation should begin in the short term, preferably immediately.

**Action Plan**

The major tactics required to carry out this strategy include the following:

- Develop a set of priorities and criteria for new PDWR members. Decide which types of members PDWR needs first, then decide which characteristics are required in order for a new member to fit within the current group. Based on current supply and demand pressures, it is highly recommended that additional beef producers be the first new membership priority.
- Actively promote PDWR as a growth company with benefits for members as described above. Start the search for new members through word-of-mouth in the local area. Expand into the larger regional area if necessary, but keep in mind that moving further out geographically entails higher costs in terms of communication, scheduling meetings, and

understanding each other's business processes. Nevertheless, this may be necessary in order to attract certain members from the retail sector, for example.

- Invite potential members to Board meetings on a get-to-know-you basis, to allow all members to meet them. Afterwards, if the group accepts the newcomer, open negotiations with the potential member regarding conditions of membership, which will vary depending on the services/products/knowledge that the new member can offer. If negotiations are successful, accept the newcomer as a bona fide PDWR member.

**Critical Success Factors**

The following critical success factors should be measured and monitored:

- Variable costs of production, delivery, processing to be tracked and compared to historical cost trends. Identify cost savings and/or increases, and consider adjusting member arrangements if necessary.
- If a retailer/wholesaler member is added, compare sale price against historical sales revenues. Identify favourable or unfavourable price trends, and consider adjusting member arrangements if necessary.
- Analyse overall costs, revenue, and production trends to determine if new members have contributed to increased production efficiencies and economies of scale. This analysis may be as detailed as measuring the savings of shared equipment/resources, or as general as making observations on product quality improvements.

## REFERENCES / BIBLIOGRAPHY


Aaker, David A., 1991, Managing Brand Equity: Capitalizing on the Value of a Brand Name, The Free Press: New York, 299 pp.

Acres U.S.A., 1998*a*, "Comment and criticism of the proposed organic rules", Acres U.S.A., February, 1998.

Acres U.S.A., 1998*b*, "A natural at ranching", Acres U.S.A., February, 1998.

Adams, Victoria, 1999, co-founder, Earth to Table, personal communication, August 18, 1999.

Alberta Agriculture, Food, and Rural Development [AAFRD], 2000, www.agric.gov.ab.ca, website.

Albrecht, Steven, 1994, Service, Service, Service: The Growing Business' Secret Weapon, Bob Adams, Inc.: Holbrook, MA, 288 pp.

Allen, Scott, "Tinkering with dinner's DNA." Times Colonist, July 25, 1999, p. A8.

Ames, Paul, "Organic farming thrives as Europe reels from food scares." Associated Press, December 6, 1999.

Barber, Terrence, "Overview of the Japanese market for consumer-ready agricultural products", GAIN Report (US Department of Agriculture, Foreign Agricultural Service), JA8516, August 7, 1998.

Barnett, Antony, & Wintour, Patrick, "Experiment gone wrong led to mad-cow epidemic: experts." Globe and Mail, August 9, 1999, p. A9.

Barnett, Vicki, "Beef industry hits it big in Japan." Calgary Herald, June 4, 1997.

Bean, William, 1993, Strategic Planning That Makes Things Happen: Getting From Where You Are to Where You Want to Be, Human Resources Development Press: Amherst, MA, 271 pp.

Benjamin, Todd, "Britain's organics market is healthy and growing." CNN Interactive, November 8, 1999.

Berg, Gordon, 1998, Two Year Follow-up Review: The Diamond Willow Range CED Organization, course paper, Simon Fraser University, pp. 38.

Berg, Gordon, Breitman, Terri, Chan, Christina, DeCaen, Susan, Greenfield, Joyce, Wepruk, Jackie, 1995, An Investigation of Sustainable Agriculture and Environmental Consumerism, EVDS 702 course project, University of Calgary, pp.163

Biggs, Colleen, 1998*a*, T.K. Ranch, personal communication, February 10, 1998.

Biggs, Colleen, 1998*b*, T.K. Ranch, personal communication, September 27, 1998.

Brandt, Steven, 1997, Focus Your Business: Strategic Planning in Emerging Companies, Archipelago: Friday Harbour, WA, 218 pp.

Brickert, Dennis, "Beef hormones linked to premature onset of puberty and breast cancer." Canadian Press, July 31, 1999.

Brower, Michael, Leon, Warren, 1999, The Consumers' Guide to Effective Environmental Choices: Practical Advice from the Union of Concerned Scientists, Three Rivers Press: New York, 292 pp.

Brown, Lester, 1998, "Who Will Feed China?" excerpted from The World Watch Reader on Global Environmental Issues, Brown, Lester, Ayres, Ed, editors, W. W. Norton and Company: New York, 358 pp.

Brownson, J. M. Jamil, 1995, In Cold Margins: Sustainable Development in Northern Bioregions, Northern Rim Press: Missoula Montana, 231 pp.

Canadian Food Inspection Agency (Office of Biotechnology) [CFIA], 1999, "Voluntary Labelling of Foods from Biotechnology: Report on a Qualitative Study Among Canadian Consumers", April 1999.

Canadian Organic Advisory Board [COAB], 1999, www.coab.ca, website.

Canadian Press, "Breast cancer linked to beef." Globe and Mail, July 31, 1999, p. A3.

Carley, Michael, Christie, Ian, 1992, Managing Sustainable Development, Earthscan Publications: London, 303 pp.

Consensus, "Savoring the sweet taste of success: consumers and products benefit from a new national standard that defines organic agriculture." Consensus, May/June 1999, p.12.

Consumer Reports, "Investigating 'Green' Labeling." Consumer Reports, February 2000, p. 6.

Consumers' Union, 1999, "Summary of Public Opinion Surveys Related to Labelling of Genetically Engineered Foods", June 30, 1999, 6 pp.

Cook, Kenneth J., 1992, AMA Complete Guide to Small Business Marketing, NTC Business Books: Lincolnwood, Illinois, 162 pp.

Cooper, Kathleen, Keenan, Karyn, & Vanderlinden, Dr. Loren, 1999. "Standard-setting to Protect Children's Health: A Summary of the Pesticides Case Study" Submission of the Canadian Enviornmental Law Association (Brief# 382) and the Ontario College of Family Physicians (Environemntal Health Committee) to the House of Commons Standing Committee on Environment and Sustainable Development, November 10, 1999, 16 pp.

Cooper, Robert G., 1993, Winning at New Products: Accelerating the Process from Idea to Launch, Addison Wesley Publishing: New York, 358 pp.

Crainer, Stuart, 1998, Key Management Ideas: Thinkers That Changed the Management World, Financial Times Prentice Hall: London, 304 pp.

Crainer, Stuart, 1999, The 75 Greatest Management Decisions Ever Made ... And 21 of the Worst, AMACOM: NY, 239 pp.

Cross, Richard, & Smith, Janet, 1995, Customer Bonding: Pathway to Lasting Customer Loyalty, NTC Business Books: Lincolnwood, Illinois, 254 pp.

Cummins, Ronnie, & Lilliston, Ben, "Consumers smack the USDA once again on organic standards", Food Bytes, January 25, 1999.

Cummins, Ronnie, & Lilliston, Ben, "The EPA pesticide brochure: Killing us softly", Food Bytes, January 25, 1999.

Curran, Anne, & Kautz, Gerhard, 1994, Exporting From Canada: A Practical Guide to Finding and Developing Export Markets for Your Product or Service, Self Counsel Press: North Vancouver, British Columbia, 120 pp.

Daly, Herman, 1996, Beyond Growth: The Economics of Sustainable Development, Beacon Press: Boston, 253 pp.

De Rouffignac, Peter Danton, 1990, How to Sell to Europe, Pitman: London, 260 pp.

Debelak, Don, 1992, How to Bring a Product to Market for Less Than $5000, John Wiley and Sons: New York, 298 pp.

Dimancescu, Dan, & Dwenger, Kemp, 1996, World-Class New Product Development: Benchmarking Best Practices of Agile Manufacturers, AMACOM: New York, 239 pp.

Dimitri, Carolyn, & Richman, Nessa, "Organic foods: niche marketers venture into the mainstream", Agricultural Outlook (US Department of Agriculture), AO-272, May 24, 2000.

Dunn, James R., & Kinney, John E., 1996, Conservative Environmentalism: Reassessing the Means, Redefining the Ends, Quorum Books: Westport, Connecticut, 274 pp.

Earth to Table, 1999, personal communication (attended Board Meeting), August 18, 1999.

Economist, "Farming the Garden of Eden", Economist, March 25, 2000.

Ferguson, Julia, "No resolution in talks on genetically modified food", National Post, September 30, 1999.

Fitch, Lorne, Alberta Environmental Protection, personal communication, September 1998.

Flattau, Edward, 1998, Tracking the Charlatans: An Environmental Columnist's Refutational Handbook for the Propaganda Wars, Global Horizons Press: Washington, D. C., 296 pp.

Foot, David K., 1998, Boom Bust and Echo 2000, MacFarlane, Walter, & Ross: Toronto, 313 pp.

Garcia, Ana M., et. al., "Parental agricultural work and selected congenital malformations", American Journal of Epidemiology, January 1, 1999, p. 64-74.

Genova, Don, "Now that's fresh." National Post, July 17, 1999, p.16.

Globe and Mail, "Fear of science and love of the land.", editorial, August 16, 1999, p. A12.

Global Report, "100-year drought is no match for organic soybeans." Global Report, November 8, 1999.

Greenfield, Joyce, 1997, Environmental Audits for Agriculture, Masters Degree Project, Faculty of Environmental Design, University of Calgary, 296 pp.

Griffin, Jill, 1995, Customer Loyalty: How to Earn It, How to Keep It, Lexington Books: Toronto, 242 pp.

Gruenwald, George, 1992, New Product Development: Responding to Market Demand, NTC Business Books: Lincolnwood, Illinois, 454 pp.

Hardell, Lennart, & Eriksson, Mikael, "A case-control study of non-Hodgkins Lymphoma and exposure to pesticides", Cancer, March 15, 1999, p. 1353-1360.

Hirschhorn, Joel, & Oldenburg, Kirsten, 1991, Prosperity Without Pollution: The Prevention Strategy for Industry and Consumers, Van Nostrand Reinhold: New York, 386 pp.

Hornblower, Margaret, "Wake up and smell the protest: the politics of coffee", Time, April 17, 2000, p. 52.

Horricks, Rob, Organic Express, personal communication, March 2, 2000.

Jimenez, Marina, "Whistle-blower's claims disputed by some peers", National Post, February 12, 2000, A14-15.

Kneen, Brewster, 1999, Farmageddon: Food and the Culture of Biotechnology, New Society Publishers: Gabriola Island, 231 pp.

Kohn, Anna, "Natural Growth." Financial Post Magazine, March 1998, p. 38-44.

LeGault, Michael, "Designer labels required for veggies." National Post, November 15, 1999.

Levine, Joseph, & Suzuki, David, 1993, The Secret of Life: Redesigning the Living World, Stoddart: Toronto, 280 pp.

MacDonald, Robert, Canadian Organic Advisory Board, personal communication, April 13, 1999.

MacDonald, Robert, Canadian Organic Advisory Board, personal communication, March 2, 2000.

Menchin, Robert S., 1989, The Mature Market: A Strategic Marketing Guide to America's Fastest Growing Population Segment, Probus Publishing Company: Chicago, 265 pp.

Mitchener, Brandon, "EU may ban antibiotics in animal feed." Globe and Mail, July 28, 1999, p.B9.

Morgan, Adam, 1999, Eating the Big Fish: How Challenger Brands Can Compete Against Brand Leaders, John Wiley and Sons: NY, 286 pp.

National Post, 1999*a*, "Eating, drinking, and regulating." National Post, June 11, 1999, p. A14.

National Post, 1999*b*, "Foods with power." National Post, May 15, 1999, p. B1.

National Post, 1999*c*, "Outlawed in Europe, but eaten in Canada." National Post, May 15, 1999, p. B6.

National Post, 1999*d*, "Who does the testing of Canada's new foods?" National Post, May 15, 1999, p. B6.

Nattrass, Brian F., & Altomare, Mary, 1999, The Natural Step for Business, New Society Publishers: Toronto, 222 pp.

Nayak, P. Ranganath, & Ketteringham, John M., 1994, Breakthrough! How Leadership and Drive Create Commercial Innovations That Sweep the World, Pfeiffer and Company: Toronto, 428 pp.

Neu, Keith, 1998*a*, Canadian Organic Livestock Association, personal communication, February 10, 1998.

Neu, Keith, 1998*b*, Canadian Organic Livestock Association, personal communication, September 21, 1998.

Nikiforuk, Andrew, "Food, inglorious food." Globe and Mail, June 26, 1999, p.D14.

Organic Crop Improvement Association [OCIA], 1997, 1997 International Certification Standards, pp. 61.

Organic Crop Improvement Association [OCIA], 1999*a*, www.ocia.org, website.

Organic Crop Improvement Association [OCIA], 1999b, "Growers International and Paterson Grain team up." OCIA Communicator, October/November 1999.

Organic Perspectives, "Study Shows "Meteoric" Growth in U.S. Organic Food Products Sector", December 1998.

Organic Trade Association [OTA], 1999, www.ota.com, website.

Organisation for Economic Co-operation and Development [OECD], 1995, The Economic Appraisal of Environmental Projects and Policies: A Practical Guide, OECD: Paris, 171 pp.

Organisation for Economic Co-operation and Development [OECD], 1994, Life Cycle Management and Trade, OECD: Paris, 205 pp.

Organisation for Economic Co-operation and Development [OECD], 1994, Managing the Environment: The Role of Economic Instruments, OECD: Paris, 191 pp.

Ostroff, Jeff, 1989, Successful Marketing to the 50+ Consumer: How to Capture One of the Biggest and Fastest Growing Markets in America, Prentice Hall: New Jersey, 371 pp.

Producers of the Diamond Willow Range [PDWR], 1998*a*, personal communication, February 15, 1998.

Producers of the Diamond Willow Range [PDWR], 1998*b*, personal communication, March 7-8, 1998.

Producers of the Diamond Willow Range [PDWR], 1998*c*, personal communication, May 30-31, 1998.

Producers of the Diamond Willow Range [PDWR], 2000, personal communication, June 2, 2000.

Quirks and Quarks, "Fields of Genes", CBC Radio documentary, September 4, 1999, 12:00 MDT.

Reuters, 1999*a*, "European countries resist new products from North America." Vancouver Sun, June 19, 1999, p. A11.

Reuters, 1999*b*, "Genetically modified rice boosts staple's nutrition." National Post, August 4, 1999.

Reynolds, Cynthia, 1999, "Frankenstein's harvest", Canadian Business, October 8, 1999.

Richey, Terry, 1994, The Marketer's Visual Toolkit: Using Charts, Graphs, and Models for Strategic Planning and Problem Solving, Amacom: New York, 152 pp.

Richman, Nessa J., "*The Natural Foods Market: a National Survey of Strategies for Growth.*" Henry A. Wallace Institute for Alternative Agriculture, April, 1999.

Roberts, Wayne, "Lloyd Quantz and his conversion to organic beef production." Synergy, Fall 1997, p. 17.

Schaller, Neill, "*Farm Polices and the Sustainability of Agriculture: Rethinking the Connections.*" Henry A. Wallace Institute for Alternative Agriculture, December, 1993.

Scoffield, Heather, 1999*a*, "A little flower, a big squabble." Globe and Mail, August 12, 1999, p. A1.

Scoffield, Heather, 1999*b*, "Beef war with Europe fuels health fears in Canada", Globe and Mail, July 19, 1999.

Scoffield, Heather, 1999*c*, "Ambassadors say Canada unreasonable in food disputes." Globe and Mail, July 27, 1999, p. B4.

Seeman, Neil, "Corporate fear on campus", National Post, January 11, 2000, C9-10.

Senge, Peter, 1990, The Fifth Discipline: The Art and Practice of the Learning Organization, Currency Doubleday: New York, 423 pp.

Senge, Peter, Kleiner, Art, Roberts, Charlotte, Ross, Richard, Roth, George, & Smith, Bryan, 1999, The Dance of Change: The Challenges to Sustaining Momentum in Learning Organizations, Currency Doubleday: New York, 515 pp.

Shaw, Gary M., et. al., "Maternal Pesticide exposure from multiple sources and selected congenital anomalies", Epidemiology, January 1999, p. 60-66.

Sheehy, Barry, Bracey, Hyler, & Frazier, Rick, 1996, Winning the Race for Value: Strategies to Create Competitive Advantage in the Emerging Age of Abundance, AMACOM: New York, 246 pp.

Shim, Jae K., & Siegel, Joel G., 1999, Operations Management, Barron's Educational Series: New York, 485 pp.

Sletten, Eric, 1994, How to Succeed in Exporting and Doing Business Internationally, John Wiley and Sons, Inc.: Toronto, 277 pp.

Sternberg, Steve, "Study links 'mad cow' to human illness." USA Today, December 20, 1999.

Synchronicity, "Meteoric growth for organic food." Synchronicity: The Magazine, April/May 1999, p. 39.

Thierren, Raphael, 1996, Environmental Auditing of Prairie Farms, Masters Degree Project, Faculty of Environmental Design, University of Calgary, 197 pp.

This Morning, "Fields of Genes: The Battle Over Biotech Foods", radio documentary, May 3, 1999.

Treacy, Michael, & Wiersema, Fred, 1995, The Discipline of Market Leaders: Choose Your Customers, Narrow Your Focus, Dominate Your Market, Addison-Wesley: New York, 208 pp.

Tuller, Lawrence, 1994, Entrepreneurial Growth Strategies: Strategic Planning, Restructuring Alternatives, Marketing Tactics, Financing Options, and Acquisitions, and Other Ways to Propel the New Venture Forward, Bob Adams: Holbrook, MA, 302 pp.

U.S. News and World Report "'Dolphin-safe' tuna label gutted by U.S. Commerce Secretary.", May 10, 1999.

Underhill, Paco, 1999, Why We Buy: The Science of Shopping, Simon & Schuster: New York, 255 pp.

Van den Broek, Astrid, "Changes brewing at coffee chains", Marketing, November 15, 1999, p. 2.

Virgin, Bill, "General Mills buys out a major organic food company." Seattle Post-Intelligencer Reporter, December 16, 1999.

Welsh, Rick, "*The Economics of Organic Grain and Soybean Production in the Midwestern U.S.*" Henry A. Wallace Institute for Alternative Agriculture, May, 1999.

Woodcock, Brian, "Food product export opportunities in Western Canada", GAIN Report (US Department of Agriculture, Foreign Agricultural Service), CA9141, December 23, 1999.

World Commission on Environment and Development [WCED], 1987, Our Common Future, Oxford University Press: Oxford, 400 pp.

## APPENDIX A: MDP INTERVIEW QUESTIONS

### Client Interviews

Interviewees: Members of Producers of the Diamond Willow Range (PDWR).

The purpose of the interview is to identify problems and successes of the company's operations and to collect information on how the company operates. Participants are co-owners of PDWR, and are guaranteed anonymity in the report.

- Describe the structure of PDWR, including production processes, sales/marketing strategy, cost structure, decision-making process, and administrative operations.
- Describe the sources of information and/or resources that were used in setting up the company.
- What were the initial setup costs of the company? Are there any present or future financial needs for additional capital?
- What is the total production capacity of the company?
- Were you organically certified with any agency before joining PDWR? If not, at what stage of organic production were you at? What stage are you at now?
- At what point do you give up ownership of cattle?
- What kinds of cattle are going to market?
- Are there any seasonal fluctuations in production?
- At what point are you paid for cattle? Is there a time lag between sale and payment?
- How did you change production to become organic?
- What were the direct and indirect costs of certification?
- Have you noticed any benefits of organic production in terms of operational costs, improved beef product, or range resources? If so, what are they?
- Do you have any concerns with OCIA standards?
- Do you expect production cost per head to stabilize downwards at some point?
- What are your responsibilities in production with regards to: production, delivery, feedlot, or processing for PDWR?
- Has your cattle tracking program changed or improved as a result of PDWR?
- Are you optimistic about the potential to increase production?
- What new responsibilities have you taken on with regards to: marketing, administration, or accounting for PDWR?
- How easy or difficult was it to take on these new responsibilities?
- Why did you feel that you should take on these new responsibilities?
- Who do you feel are PDWR's main competitors?
- Who is your target market?
- What are PDWR's challenges in marketing its product?
- Have you gained net profit per head for organic cattle?
- Overall, are you optimistic about economic growth for your own operations? PDWR's operations?

- Comment on PDWR's skill set and challenges regarding the following: marketing, administration/accounting, labour management, financing/capital, operations/production practices.
- Which external resources, organizations, and/or consultants have been helpful to PDWR?
- What future projects or issues would you like to have external resources work on in the future?
- Do you feel that you are more aware of the beef industry as a whole, as a result of being part of PDWR?
- Do you feel you have more control over your own economic success?

**Competition Interviews**

Interviewees: Competitors in the organic beef industry.

The purpose of the interview is to collect information on the size, strength, and marketing strategies of directly competing producers. Interviewees are guaranteed anonymity and are given the option to decline from answering any questions which they are not comfortable with, or which are of a sensitive nature.

- How many members does your producers' group have? Approximately how many head of cattle does this represent?
- Describe the sources of information and/or resources that were used in setting up the company.
- Are all members certified organic? If not, what is the percentage of fully certified, transitionally certified, and non-certified producers?
- Which certification program do you use?
- Do you believe that certification is a benefit/advantage for organic beef? Why?
- How is your beef sold and distributed through your producers' group?
- Are your producers spread out over a large area? If so, how has your organization been able to organize and communicate among all members?
- Does your beef get processed at a federal or provincial processing plant? Is the plant part of the certification program?
- Who are your current customers? Do you plan to aggressively expand beyond your current customer base in the near future?
- How do you market your beef currently? Do you foresee a need to change your marketing strategy in the future?
- What preparations did your organization do as part of its startup (e.g., market feasibility studies, production estimates, processing capabilities, etc.)?
- Do you have any strategic alliances with other organic organizations, such as processors, suppliers, or other producers? (For the purposes of this interview, a strategic alliance is a partnership between different organizations where expertise of resources are shared, or where there is an exclusive contract between parties such that there is a lot of dependencies between them.)
- Would you be interested in developing strategic alliances with any of the following: 1) certified organic processors; 2) other organic beef producers; 3) organic suppliers. If yes to any of these, explain the potential benefits of these alliances.

**Industry Interviews**

Interviewees: Representatives of the organic food industry, including producer and marketing associations.

The purpose of the interview is to identify trends in organic agriculture and to collect information on the current size, strength, infrastructure, and operational aspects of the industry. Interviewees are identified in the report as expert sources.

- Describe your assessment of the current state of the organic agriculture and/or organic beef industry in Canada, U.S., and/or Europe, especially in terms of the following: target market, size of market, percent of total food market, producer groups size/strength/organization, and the role of government in regulation, financial support, and marketing.

- What, if any, are the most important challenges that need to be overcome in order to facilitate trade in Canada or for export? Why?

- How should these issues be resolved (i.e., who, what, where, and how)?

- Describe the current efforts of organizations within the organic sector that will affect the future of organic beef and agriculture.

- Describe the sources of information and/or resources that were used in setting up the company.

**Certifiers Interviews**

Interviewees: Representatives from organic certifying agencies.

The purpose of the interview is to collect information on the role and influence of certifiers in the production and marketing of organic products. Interviewees are identified in the report as expert sources.

- How do you see your role with the new National Organic Standards?
- Describe some of the issues and challenges that you faced when certifying organic beef in the past.
- Would you describe organic practices to be close to sustainable practices? Why or why not? (Interviewer will define organic and sustainable agriculture)
- How do you see your role in promoting organic food, if at all?
- Which were the most popular certification standards that you have been asked to audit for?
- Under the new national standards, organic operations must conform to the "spirit of the standard" of organic production. Describe a hypothetical example of how 2 ranchers might produce organic beef using different production methods, while still conforming to the spirit of the national standard.

**Sustainable Development Interviews**

Interviewees: Wildlife and agriculture production experts.

The purpose of the interview is to collect information on the effects of sustainable development practices. Interviewees are identified in the report as expert sources.

- Compare the major differences of the effects of current conventional vs. sustainable practices in beef production.
- What would be the ideal model of a sustainable beef production system? What would be the benefits/incentives and costs to ranchers? What would be the benefits and costs to consumers?
- How do we measure the differences between conventional and sustainable ranching? Do these measures exist now?
- Which criteria can be used to measure ranching sustainability? Are there standards for these criteria?
- What is the potential of using "environmental certification standards" (in contrast to organic certification standards, which tend to be product-oriented)?

# APPENDIX B: PRODUCERS OF THE DIAMOND WILLOW RANGE BROCHURE

### WHAT MAKES OUR BEEF SPECIAL?

- Free from antibiotics and artificial hormones
- Grass-finished beef seasonally available
- Quality animals selected from our own herd
- Producer retains ownership of animal from birth to retail
- Pending certification by the Organic Crop Improvement Association (OCIA)

| | |
|---|---|
| OOO | Freeman Ranch<br>Jamie & Cec Mae Freeman |
| NE2 | Frith Ranch<br>Larry & Jan Frith |
| K6 | Ketaoreti Ranch<br>The Simmons Family |
| M X | MX Ranch<br>Janet Main, Charlie Strasszle, Mac Main & Families |
| | McRae Ranch<br>Mac & Peggy |
| 6VU | Mt. Sentinel Ranch<br>The Gardners: Frances, Bonnie & Family |
| JK | Salix Enterprises<br>Bill Elton, Carol Gottlief & Family |
| | Stillridge Ranch<br>Keith & Bev Everts & Family |

Printed on 100% recycled paper

### OUR BEST AND WE GUARANTEE IT!

Our tracking system offers you the opportunity to give us feedback on our program help us develop a product that meets your needs!

- Animal identity is established at the individual member ranches. Ownership and identity are maintained through feeding, processing and retail levels
- We hand select our cattle at each production level to assure premium quality.
- Inspected and graded to federal standards

For further information about Producers of the Diamond Willow Range and our management methods, or to arrange a ranch visit, contact


Frances and Bonnie Gardner
PRODUCERS OF THE DIAMOND WILLOW RANGE
Rural Route #1
Nanton, AB T0L 1R0
Phone (403) 646-5638
Fax (403) 646-2435
Toll Free 1-888-288-8810


## PRODUCERS OF THE DIAMOND WILLOW RANGE

Presenting a New Choice in Beef from the Eastern Slopes of the Canadian Rockies

### A HEALTHY ALTERNATIVE

Healthy animals in a balanced ecosystem and low stress environment will produce a healthy beef product. The new premium cuts, like those of Diamond Willow Range, are recommended in Canada's new Food Guide to Healthy Eating as an important source for:

- high quality protein
- iron & zinc
- vitamins B6 & B12
- niacin

**100% SATISFACTION GUARANTEED!**

### WE ARE THE PRODUCERS OF THE

## DIAMOND WILLOW RANGE

Along the eastern slopes of the Canadian Rockies lies a unique ecosystem where the diamond willow grows. Here, eight ranching families have committed themselves to raising antibiotic and growth hormone free beef. Our cattle are raised on range and feed that will achieve the internationally known standards of the Organic Crop Improvement Association. As a member of the Alberta family of beef producers, we offer consumers a new choice in beef.

M X OOO K6 6VU JK NE2