ISSUES RELATING TO VALUE-ADDED PROCESSING OF AGRICULTURAL PRODUCTS IN MANITOBA

1994-4

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ISSUES RELATING TO VALUE-ADDED PROCESSING
OF AGRICULTURAL PRODUCTS IN MANITOBA

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PREFACE

The primary aim of this project was to identify impediments to value-added processing of agricultural products in Manitoba. The need for such a study was identified generally by members of the External Advisory Committee of the Rural Development Institute. Project details were further specified by a Steering Committee established to assist the project. All parties recognized that in spite of a collective desire to see more local processing, progress in value-added industries appeared to be slow.

In a series of meetings held across the province, processors, researchers, producers and regulators met to discuss the issues relating to value-added processing in twelve agricultural sectors. The meetings were well-attended, and discussion often was lively. Perspectives varied widely amongst participants, and a variety of viewpoints are presented in the report.

The authors appreciate the advice and guidance given by members of the Steering Committee: Ron Riopka and Mark Boreskie (Manitoba Rural Development), Gerry Moore (Economic Development Board), and Wayne Digby (Manitoba Agriculture). We acknowledge the support shown by members of the External Advisory Committee of the Rural Development Institute. Financial support was provided by the Government of Manitoba through the Department of Rural Development, the Honourable Len Derkach, Minister. We are indebted to the many people who attended meetings in person and discussed issues over the telephone. Special thanks are extended to Joan Rollheiser, Administrative Assistant at RDI, for serving as the project assistant, arranging and recording meetings, and preparing the final document for publication.
EXECUTIVE SUMMARY

This study of Manitoba's agricultural processing industry was aimed at identifying impediments to the development of value-added products. The approach was to stage sectoral and regional meetings with industry leaders and others directly involved in value-added processing.

A total of eleven meetings were held with people directly involved in each of the agri-food sectors. A twelfth sector (fisheries) was investigated through a combination of telephone conversations and review of published material. Three additional regional meetings were staged to assure a full range of participation of producers in the study. Where key individuals were unable to attend the sector meetings, follow-up telephone interviews, or personal meetings were arranged. Approximately 130 people participated in the study.

A significant amount of information on each sector was gathered in addition to that which dealt directly with impediments. In order to capture this information and to serve a broader readership, the study team decided to include sector profile information in this report. For the same reason, members of the study team have provided additional data and some personal experience where it was considered beneficial. Although this general and factual information will be of value to many seeking a greater appreciation for the challenges and opportunities of value-added processing, it is not intended to provide a comprehensive analysis of any of the individual sectors.

Section 2 of the report identifies many of the challenges and impediments dealing with value-added production, particularly as they pertain to rural locations. Section 3 contains information on the scope, notable characteristics, and significant issues for each of the 12 sectors studied. Brief sector analyses also are included in this section.

Because the primary aim of this study was to identify factors which are restricting the growth of the provincial agricultural processing industry, we recognized that discussion would dwell more on the negative than on the positive. Readers of this report should, therefore, understand that the comments and conclusions presented reflect the responses to the question "what are the impediments to value-added processing", not "what should be done to improve the economic plight of rural Manitoba". In certain cases, the answer to these questions may be one and the same, but this does not necessarily follow in all cases.

Trade data was obtained from Statistics Canada. The figures clearly show that Manitoba exports of consumer-ready food products is not only the lowest of any province west of the maritime provinces, but also that it is the only province that had decreasing exports in this category. The latest data available indicate Manitoba exports of consumer-ready food products dropped from 10.4 percent of all food exports in 1988 to 3.9 percent in 1992. Although this figure is still higher than the 2.7 percent recorded for Saskatchewan, because of that province's larger total export of food products, the percent figure is misleading. In actual exports of consumer-ready products, Saskatchewan exported 50 percent more than Manitoba in 1992, and showed clear signs of growth in this category.

Although several factors surfaced as impediments to value-added processing, marketing boards were consistently identified as the number one issue. Participants recognized that controlled marketing systems were introduced to assist farmers, but there was a high level of concurrence that the down-side consequence of the system has been the restriction of the growth and development of the processing industry in certain sectors. Indeed, some participants questioned whether the controlled marketing system had done much to help the farming community in general, in view of the continuing reduction in numbers of farm families.

Subsidized rail transport of selected commodities also was identified as a significant impediment to the growth of the processing sector. There was general agreement that a removal of this impediment would result in a more favourable feed price differential in Manitoba when compared with Ontario and B.C. This in turn
would lead to increased opportunity for establishing profitable livestock and processing ventures within the province.

A third theme that came through in most of the sector meetings related to concerns about unanticipated and punitive trade sanctions which may be imposed by foreign countries. There was general acknowledgment that the free trade agreements were a step in the right direction, but ongoing federal government effort is needed to assist in building the level of confidence required to attract investment capital in the processing sector.

Another clear message that came out of this project was that many Manitoba farmers have a strong belief that they can be competitive at the farm gate in terms of quality and price. Most agricultural experts agree. Although the feelings were not unanimous, most participants felt that Manitoba would come out ahead in attracting value-added investment should support structures be equitably reduced, or eliminated, in all countries.

Concern was voiced about the apparently shrinking level of technological and research support received by the agri-food sector. It was generally recognized that without effective effort, the province is destined to slip even further behind other locations in value-added processing.

There also was a clear message voiced that producers, processors, researchers, retailers, and bureaucrats must all work towards a common purpose if true progress is to be made in the future.

The report does not contain specific recommendations to government, or to industry, as this was not an objective of the study. However, government leaders are urged to carefully consider the results and to take steps to remove impediments if they truly believe that the future of rural Manitoba lies in increased value-added processing. Similarly, industry must be willing to work cooperatively with all participants towards the common good of all Manitobans.
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<td>49</td>
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<td>Raspberries</td>
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Table 1. Provincial Agri-food Exports in 1992 Based on the Degree of Processing (Millions of dollars)\(^1\)

<table>
<thead>
<tr>
<th>Degree of processing</th>
<th>BC</th>
<th>AB</th>
<th>SK</th>
<th>MB</th>
<th>ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk</td>
<td>50.3</td>
<td>1676.9</td>
<td>2946.5</td>
<td>1090.2</td>
<td>331.1</td>
</tr>
<tr>
<td>(9.1%)</td>
<td>(58.6%)</td>
<td>(84.5%)</td>
<td>(67.3%)</td>
<td>(10.9%)</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>199.1</td>
<td>791.9</td>
<td>445.9</td>
<td>467.0</td>
<td>858.9</td>
</tr>
<tr>
<td>(35.8%)</td>
<td>(27.7%)</td>
<td>(12.8%)</td>
<td>(28.8%)</td>
<td>(28.3%)</td>
<td></td>
</tr>
<tr>
<td>Consumer</td>
<td>306.2</td>
<td>392.3</td>
<td>93.0</td>
<td>63.2</td>
<td>1846.2</td>
</tr>
<tr>
<td>(55.1%)</td>
<td>(13.7%)</td>
<td>(2.7%)</td>
<td>(3.9%)</td>
<td>(60.8%)</td>
<td></td>
</tr>
<tr>
<td>Total Exports</td>
<td>555.6</td>
<td>2861.1</td>
<td>3485.4</td>
<td>1620.3</td>
<td>3036.3</td>
</tr>
</tbody>
</table>

Source: Agriculture Canada

Although Manitoba exported close to $1.6 billion of agri-food products, only $63.2 million (3.9 percent) was "value-added" to the consumer product status. This amounts to about one-fifth of the exports of consumer products achieved by B.C., less than one-sixth that of Alberta processors, and about 3 percent of the level achieved by Ontario processors. Although data is not available, it is also generally recognized that Manitoba is a significant net importer of processed food products from other provinces within Canada.

Perhaps the most disturbing fact is that in spite of the increasing interest in value-added processing, the trend in Manitoba has been going the other direction. Table 2 graphically indicates what has been happening. While Manitoba’s exports of consumer products dropped from 10.4 percent to 3.9 percent, B.C.’s increased from 32 percent to 55 percent, Alberta’s increased from 9 percent to 13.7 percent and Ontario’s increased from 58 percent to 61 percent. Saskatchewan’s exports of consumer packaged agri-food products during this time increased slightly from 2 percent to 2.7 percent.

Table 2. Manitoba Agri-food Exports from 1988 to 1991 Based on the Degree of Processing (Millions of dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk</td>
<td>660.7</td>
<td>725.7</td>
<td>885.3</td>
<td>945.1</td>
<td>1090.2</td>
</tr>
<tr>
<td>(62.3%)</td>
<td>(68.6%)</td>
<td>(67.6%)</td>
<td>(68.3%)</td>
<td>(67.3%)</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>289.4</td>
<td>226.9</td>
<td>347.8</td>
<td>376.8</td>
<td>467.0</td>
</tr>
<tr>
<td>(27.3%)</td>
<td>(21.5%)</td>
<td>(26.5%)</td>
<td>(27.2%)</td>
<td>(28.8%)</td>
<td></td>
</tr>
<tr>
<td>Consumer</td>
<td>110.3</td>
<td>104.8</td>
<td>77.3</td>
<td>61.9</td>
<td>63.2</td>
</tr>
<tr>
<td>(10.4%)</td>
<td>(9.9%)</td>
<td>(5.9%)</td>
<td>(4.5%)</td>
<td>(3.9%)</td>
<td></td>
</tr>
<tr>
<td>Total Exports</td>
<td>1060.4</td>
<td>1057.4</td>
<td>1310.4</td>
<td>1383.8</td>
<td>1620.3</td>
</tr>
</tbody>
</table>

Source: Agriculture Canada

\(^1\) These figures exclude fish exports. If included, BC’s exports increase by $650 million and MB’s by $47 million.
In spite of the fact that Ontario has the most advanced food processing sector in Canada, that province is currently reviewing its agri-food industry. The review was initiated as a result of private sector leaders identifying a need to address critical impediments to growth of their industry. In a preliminary report, the study group concluded the following with regard to value-added processing:

"Consultation committees have recommended that a major thrust should be in developing value added products. Adding value to a locally produced or imported product for use within the domestic or export market could stimulate economic renewal in individual sectors of the agri-food industry, benefit all links of the sector and contribute to rural economic development."

**Study Purpose**

The primary purpose of this study is to identify the impediments which restrict value-added processing in Manitoba. The audience for this portion of the study is both government and industry leaders. In many cases, the impediments are well known to both these groups, but the Advisory Committee recognized the value in recording comments of a wide cross-section of people directly involved in value-added processing in each of the agri-food sectors and in various regions of the province. By documenting these impediments, industry and government will be in a better position to assess value-added opportunities. This study may also assist government in determining which impediments should be removed for the net benefit of the province.

A secondary aim of this study was to present some general information on the various agri-food sectors to help educate entrepreneurs looking to start an agri-food processing business. This report may assist people who are new to the industry in gaining a feel for agri-food processing and learning of some of the challenges and opportunities they will face.

The report which follows is not intended to be a complete review of the individual sectors, nor is it to be considered a road map to potential new venture opportunities. A full analysis of each sector would have required much more time and effort. The primary purpose is to identify the perceived impediments to value-added processing as identified by those most familiar with the industry. The means by which these perceived impediments can be overcome also was not within the scope of this study, although some potential solutions were apparent and surfaced in the discussion and have been included in the report.

Because the study focused on impediments, the tenor of discussion tended to concentrate on needed improvements. This approach was taken for constructive reasons and should not lead to the conclusion that all is negative in the agri-food sector. Many opportunities are proprietary and not discussed by the industry.

**The Process**

The project involved a series of meetings with key individuals in each of twelve agricultural sectors. Participants were asked to comment on the processing opportunities within their sector, and to identify any impediments which would restrict these opportunities from being pursued. Sector meetings included representatives from the production, processing, marketing, regulatory, and research sub-sectors. Meetings were also held in three regions of southern Manitoba with a diverse group of agricultural producers, each of whom were interested in value-added processing. Follow-up discussions were held with key individuals who were unable to attend the scheduled meetings. A full list of participants is presented in Appendix A.

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2 For purposes of this study, the fish industry has been included as one of the twelve "agricultural" sectors.
Report Structure

The second section of the report identifies some of the key elements which impact upon all agricultural processors operating in rural Manitoba. The net effect of these impediments will vary for different sectors, and different locations throughout the province. These generic factors are addressed in this one section rather than being repeatedly dealt with in each of the individual sectors to follow. Many of these elements came up in the group discussion, others are based on experience of the study authors.

The third section deals specifically with each of the twelve agricultural sectors reviewed. Comments on each sector include a brief overview depicting the scope of the sector, a list of important industry characteristics, a specific review of the major issues and impediments which the industry faces, and, concludes with a brief sector analysis. Much of the information presented in this section came from people interviewed and/or existing published information. The conclusions presented in each sector analysis were prepared by the authors, based upon their understanding of the comments received from people interviewed.

The findings of the regional meetings are reported in the fourth section. The information has been presented as a series of quotes or paraphrases of comments made by the study participants. Interpretation of these comments has been left to the reader.

The final section presents general conclusions as drawn by the authors. Effort has been made to focus on the key impediments to value-added processing. It should be pointed out that some of the impediments to value-added processing are indeed seen as important advantages to other sub-sectors. Perhaps the best example of this is the "Crowsnest Pass" freight subsidy, which is valuable to exporters of raw grain, but a serious impediment to value-added processing within the province. The conclusion as to whether removal of any specific impediment will result in a net benefit or loss to the provincial economy remains to be determined.

Although readers are encouraged to review the entire report, Sections 2, 4 and 5 may be of most interest and relevance to government and industry leaders. Entrepreneurs may find greater value in Sections 2 and 3 as the comments and data presented in those sections will assist them in gaining a general understanding of each of the agri-food sectors.
SECTION 2

GENERAL CONSIDERATIONS

Whether a processor is manufacturing food or industrial products in rural Manitoba, there are a number of common factors which must be considered in determining the competitiveness of an industry. The following general comments organized under twelve categories apply, at least to some degree, to all of the agricultural sectors addressed in Section 3.

Material Supplies

Raw product

Although in some cases the cost of the raw product represents only a small fraction of the retail selling price of a processed product, the initial cost of the base material is important to the processor in locating, or expanding, a processing business. In addition to cost, the processor also requires raw product of consistently high quality, and assured availability. The price a processor is prepared to pay is a combination of these three attributes.

Manitoba is fortunate to have a combination of land, soil, water and climate which is conducive to the production and support of a fairly wide range of agricultural products. The vast majority of these can be produced at competitive costs and with generally high quality. Unfortunately, from time to time, both quality and yield can be low as a result of variable weather.

In assessing the potential for developing value-added industries, it is essential to know which raw products are currently, and will remain competitive with commodities grown in other regions of the continent. Equally important is the thorough understanding of the impact that raw product variability will have on a processing operation.

Other Materials

The cost of materials used in value-added processing, other than the raw agricultural commodity, also is important. In fact in some processing operations, the total cost of other ingredients can substantially exceed those of the base product. As a general rule, Manitoba is deficient in the manufacture of food ingredients and industrial chemicals. Some previously produced ingredients (e.g. salt, vinegar and spices) now must be imported. Consequently Manitoba processors often incur proportionately higher costs for some materials than do their competitors. Rural processors face the additional cost of trans-shipping ingredients through Winnipeg. Start-up operations and cottage industries also face the increased costs resulting from the need to purchase and transport small quantities of materials.

The fact that material costs generally are higher in rural Manitoba does not mean that all ingredient costs are higher. For example, by-products from existing processing plants are often available at very competitive prices. A case in point would be the starch recovered from the waste stream at the Carnation Foods Ltd. potato plant in Carberry. This ingredient is currently being semi-processed and sold to a processor in Washington State. Food ingredients from the oat and pea processing plants in Portage la Prairie also are available at competitive prices.
Capital Costs

Land

Although the cost of land is highly variable within the province, on average, it is low compared to that of most of our competitors.

Equipment

Standard farm equipment is competitively priced as there are several implement manufacturers within the province. However, specialized production and processing equipment must carry the incremental freight costs from distant manufacturing facilities. Much of the sophisticated food processing equipment is manufactured in Europe or Japan.

Construction

Depending upon the structure, the cost of building construction may be higher or lower than that found elsewhere. On average, costs are probably marginally higher than those of competitors.

Availability of Technology

A great deal of technology is available to those wanting to do value-added processing of agricultural products. Much of the information can be obtained at little or no out-of-pocket cost if a person is prepared to spend time searching the literature and contacting technical experts. Information which is not readily available to the entrepreneur, or is of a complex technical nature, often can be obtained and interpreted by university personnel, private consultants or government representatives. Depending upon the novelty and development potential of the technology, public sector funding support may be available to offset some of the research costs associated with the project.

Technology is important in value-added processing for two reasons. First, technical know-how serves as an excellent way to protect against major delays and set-backs which would otherwise inevitably occur at later stages in the venture. And second, if a company is able to incorporate technological sophistication into a product or a process, competitors are far less likely to produce a cloned product. In fact, some entrepreneurs will only consider ventures which are based on complex technologies for this reason.

Rural entrepreneurs should clearly understand that certain business costs associated with technology searching will be higher owing to their location. This may pose a particular problem during the early investigative stages when unavoidable travel and communications costs can be significant.

Although there have been reductions in government support for new ventures in recent years, over the previous 20 years, there has not been a shortage of funding available from the Federal Government. The restriction to the development of higher value-added products has been the lack of either or both financial commitment on the part of the private sector, and legislation focused on exported raw product.

Packaging

The impact of packaging on the profitability of a business must be carefully assessed when analyzing value-added processing opportunities. In certain cases, the cost of the package can be as much, or more, than that of the contents. Where expensive packaging is necessary to meet consumer demands, packaging costs and availability can become deciding factors in selecting the location of a processing plant.
There is no question that development of Manitoba’s agri-food processing industry has been constrained in the past owing to the absence in this province of both glass and metal can manufacturers. The cost of shipping empty containers from southern Ontario, or Alberta, to Manitoba is a significant impediment to overcome when alternate packaging options are not appropriate.

Fortunately, there has been a marked trend over the past 15 years to increased use of flexible packaging and less of glass and metal containers. In addition to the generally lower cost of this type of packaging, Manitoba is home to one of North America’s leading manufacturers of laminate packaging films. One role of film, which could be placed in the trunk of a car, will replace several truck loads of cans or glass jars.

Entrepreneurs seeking to enter the U.S. market must be aware of differences in package sizes and in labelling laws in the two countries. These costs along with the requirement for bi-lingual labelling in Canada must be taken into consideration when calculating production costs.

Transportation Issues

The vast majority of shipping in rural Manitoba is handled by Manitoba based trucking companies. The recent trend of smaller community based companies being purchased by larger Winnipeg based firms will have an impact upon rural operations. Time will tell if this results in significant changes in the level of service and whether rural processors will experience higher or lower trucking rates.

Manitoba is one of three provinces that still has intra-provincial trucking authorities in force. This legislation effectively reduces trucking competition throughout the province for designated goods. Many view this as a detriment to rural manufacturing companies. Prior to spending significant amounts of time or money on product and process development, it would be wise for entrepreneurs to assess transportation options to determine their respective impact upon a new business.

Travel restrictions come into effect on many rural roads during certain times of the year. This also impacts rural processors and must be taken into consideration in assessing a new venture.

Cottage industries and other start-up operations face particular challenges as much of their production and supplies are in less than truckload (LTL) quantities. LTL shipping costs can be particularly high in rural locations.

To add to the challenges facing rural processors, many food items must be shipped under refrigerated conditions. This can lead to even higher costs and scheduling problems as many of the licensed carriers do not have refrigerated trucks.

With the only container handling facility being located in Winnipeg, processors in the western and northern regions of the province incur added shipping costs and time delays on containerized product destined for western Canadian or Pacific rim customers.

Production Costs

Labour

Given the chronic low prices for cereal grains and other farm products, many people in the farming community are actively seeking income from off-farm employment. As a result of this situation, processors generally would find a good supply of competitively priced labour in rural Manitoba. A greater challenge would be to find, or attract, specifically trained people for skilled positions. The net affect of labour supply on a rural processor would depend upon the size and mix of the required labour pool.
Conversely, urban-based processors who are unionized face different labour issues. It is known that differential wage rates between Canada and the United States, especially in the meat-packing industry, are significant enough to affect the competitive position of major processors.

Water

The supply of quality water and the options regarding the discharge of water after it has been used are important to agricultural processors. Depending upon the location of a processing plant within the province, the supply and disposition of water may be an asset, or a liability. Processors must develop a clear understanding of their water and sewage requirements and obtain appropriate assurances from local and provincial authorities concerning the availability and cost of water services. Processors must factor in the long term costs of these services to their operations.

Energy

Low hydro-electric costs in Manitoba are a definite advantage to processors requiring significant quantities of this form of energy. On the negative side, the demand billing system used by Manitoba Hydro serves as a serious impediment to processors with high energy demands over a short time period. Monthly charges for users on demand load are based on the peak load established at any time throughout the year.

Taxes

Generally speaking, taxes in rural communities are significantly lower than those in larger centres. The absence of tax increases over the past several years has made many areas of the province competitive with other jurisdictions in North America. Entrepreneurs should be made aware, however, that under the current Government of Manitoba Municipal Act, communities are not at liberty to offer tax incentives to attract new business. This is consistent across Canada, but is not so in the U.S.

Markets

The relatively sparse population in rural Manitoba, and throughout the prairies in general, is a restricting factor for a significant number of value-added products. However, for the same reason, many products originating outside the region tend to be higher priced in rural stores than they would be in city supermarkets. Rural cottage industries can use this isolation factor to advantage for certain processed products. Similarly, major processors located in rural areas represent a potentially solid market for suppliers of specialty ingredients or supplies for that processor, primarily owing to local freight advantages.

Access to Capital

A common theme in rural Manitoba is that entrepreneurs do not have sufficient access to capital. This may or may not be true, depending upon the individual(s) involved and the nature of the proposed new business. Generally speaking, it is difficult to find either public, or private, funding for developing, or investigating, ideas. As a general rule, entrepreneurs are required to invest personal time and capital into the preliminary investigation and idea generation stages. This initial investment can often run into the tens, or even hundreds, of thousands of dollars when one includes the cost of the time invested. However, once both target products and markets have been identified and the potential for economic payback established, it is possible to use one of several government support programs to develop the product and to assess the feasibility of a proposed new business venture. Traditionally the support at this stage has been between 30 and 50 percent and the monies have been non-refundable.
Start-up companies should be made aware that recent changes to the tax laws relating to research expenses allows them a tax refund, rather than a tax credit as was the previous case. Thus it is advisable to follow a structured and documented approach when conducting investigative work that could qualify as “research”. In certain cases it is less expensive to hire a qualified researcher to do the work than it is to do the work yourself and miss qualifying for the tax refund. Entrepreneurs should seek advice from their accountant or a research tax consultant to avoid missing this potential benefit.

The accessibility of funds for construction of a processing plant, purchase of equipment, and for other start-up costs depends greatly upon the projected profitability of the venture and upon the perceived managerial capabilities of the principal operators. Traditional investors, whether they are banks, venture capital corporations, or government lending agencies, look very carefully at the contents of the business plan and at the track record of the individuals involved. If the project and the individuals meet the criteria of the lenders, there is every indication that ample funding is available within Manitoba. There may, however, be restrictive lending policies for small industries and new innovations because of a lack of knowledge of potential profitability among local lenders.

Rural based businesses in Manitoba have an advantage over urban businesses in that they are eligible for funding under the Government’s Grow Bond Program. Under this program, the Manitoba Government guarantees the principal invested by independent third party investors into qualifying ventures. Entrepreneurs are encouraged to contact their local rural development office for details on this valuable program.

**Entrepreneurship**

Entrepreneurship is a key element in establishing any new venture. People wanting to enter the value-added processing business must show a willingness to take risks, and an ability to make tough decisions.

There is a general consensus that Manitobans as a group are lacking in entrepreneurial spirit. However, some people close to this industry dispute this traditional thinking. They would argue that there are many entrepreneurs, but most lack the skills and experience to work through the business development process which confronts someone to starting up a food processing business.

It is clear that entrepreneurship alone is not sufficient to launch a new venture. A thorough understanding of the technology involved in a processing venture, the challenges of the marketplace, and the rules and regulations associated with value-added processing of agricultural products also are essential.

**Regulations**

There is no question that some government regulations have been impediments to the expansion of value-added processing of Manitoba’s agricultural products. Many regulations which have been adopted over the past 50 years have been aimed primarily at protecting the farmer and/or the consuming public. While these regulations have been effective in meeting some of the identified goals, their success has come in certain cases at the expense of the processing sector. It is pointless to debate whether the regulations were right or wrong when they were adopted. What is important is that we understand the consequences of maintaining, or eliminating, these regulations and of any new regulations which may be adopted in the future.

There is a new wave of thinking occurring in the agricultural community with regard to the need for changes in regulations. Perhaps this has resulted from a collective realization that Canada will not soon (and may never) return to the days of agriculture where the world was beating a path to our doorstep looking for quality wheat and other commodities. This new wave of thinking also may have resulted from the adoption of the Canadian Charter of Rights and Freedoms. The Charter states unequivocally that Canadian citizens have the legal right to make a living in this country as they choose. This one statement brings into question the many
acts and regulation, both provincial and federal, which place restrictions on trade and consequently on individual rights and freedoms.

Regulations relating to food safety and to the physical environment in which foods are handled often are viewed as significant impediments to entrepreneurs looking to enter the processing industry. However, once the importance of these regulations are pointed out to the business person, and it is understood that the regulations are applied uniformly throughout the industry, most accept these as an appropriate cost of doing business. Legitimate concerns arise when the application of these regulations is different within an industry, or among different jurisdictions.

One regulation which has had a direct and marked affect on the value-added processing sector in Manitoba is the subsidized rail freight rates for designated raw commodities. For more than 30 years there has been discussion of changing the rate structure so that local processors are not disadvantaged. Unfortunately, the topic is still in the discussion stage.

Attitudes

Over the past few years, there has been a marked shift in attitudes toward the importance of value-added processing to the western economy. Many farmers, and others, are coming to realize that too great a reliance on export marketing of unprocessed products leaves them, and the entire industry, in a vulnerable economic position. The stark realization that governments may not be able to pay for farm support programs, even if they wished to do so, also has been a factor in shaping attitudes. Regardless of the reasons, many Manitobans, and particularly farmers, are showing real interest in finding ways of adding value to their raw products before delivering them to market.

In spite of this rise in entrepreneurial thinking, some producers truly believe that without supply management legislation, several food production sectors would be driven out of business as a result of low prices offered by processors and the buying public. Supply management advocates argue that protective legislation is the only way to combat the "muscle" of big business.

Within Manitoba there is a fair degree of scepticism, negativism, and resistance to change, which impede those who are truly seeking new ways to remain competitive in world markets. The notion that processors who show a profit are doing so at the expense of farmers is still far too prevalent. When this occurs, processors either find ways of distancing themselves from the farmer, or they take their business elsewhere. This impediment must be overcome if a truly vibrant processing industry is to grow in Manitoba. Ways must be found to forge producer/processor alliances to overcome the antagonism of the past.

Another attitudinal impediment relates to Manitobans’ parochial thinking. There is a belief that local solutions must be found to local problems. Often the wealth of information and talent which resides in other countries is overlooked. The Japanese, for example, have learned how to take ideas from the lab bench to the marketplace in weeks rather than the months or years that it typically takes in Manitoba.

Generally speaking, agricultural processing has received very little attention from governments or universities in the past. Although the pendulum has begun to swing toward processing, the production agriculture preoccupation remains in many circles.

Public attitudes toward the agri-food sector are mixed. Although there is considerable support for the economic situation of the farmer, there is a substantial level of confusion and mistrust relating to the entire sector when it comes to the safety and wholesomeness of the food. Much of the confusion has come from less than accurate reporting in the news media.
Attitudes toward the humane and just treatment of animals has become an issue which has the potential to impede the development of the industry. The attitude within the industry generally is to treat animals in a humane manner. Understanding and tolerance is needed on the part of all concerned to avoid unnecessary problems.

**Environmental Issues**

Processors have become more aware of the need to operate in an environmentally friendly manner. Industrialists generally do not view protection of the environment as an impediment. However, there is a general perception that Canadian environmental protection laws, and in some cases Manitoba's laws as well, are more stringent than those practiced in the U.S. and elsewhere in the world.

It is clear to many government and industry leaders that environmental concerns are not just a passing fancy. These people believe that it is an absolute necessity for industry, and society in general, to honour the laws of nature. People seeking to enter the value-added processing business must be fully aware of their environmental responsibilities.
SECTION 3

INDUSTRY SECTORS

Information presented in this section is intended to give the uninitiated reader some basic understanding of each of twelve agri-food sectors in Manitoba. Also included are concepts and comments offered by industry leaders interviewed in the course of this study. Much of the factual data has come from the 1992 Manitoba Agriculture Yearbook.

FORAGES AND FORAGE SEED

Industry Scope

The Manitoba Department of Agriculture estimates that forages are currently grown on 36 percent of the farm land in the province. This represents about 7 million acres of land (Table 3). Approximately 13,000 farmers currently are involved in forage production in Manitoba. Estimated forage production and value data for the province for the 1991 crop year indicate a total value of $275 million (Table 3).

Table 3. Manitoba Forage Production Statistics -- 1991 Crop Year

<table>
<thead>
<tr>
<th>Forage Type</th>
<th>Acres</th>
<th>Tons</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tame Forages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hay &amp; Silage</td>
<td>1,724,500</td>
<td>3,900,000</td>
<td>$159,800,000</td>
</tr>
<tr>
<td>Dehy alfalfa</td>
<td>843,000</td>
<td>15,000</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Pasture</td>
<td></td>
<td></td>
<td>43,360,000</td>
</tr>
<tr>
<td>Native Forages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pasture</td>
<td>3,575,000</td>
<td></td>
<td>35,750,000</td>
</tr>
<tr>
<td>Hay</td>
<td>750,000</td>
<td>750,000</td>
<td>22,500,000</td>
</tr>
<tr>
<td>Annual Forages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silage corn</td>
<td>28,900</td>
<td>350,000</td>
<td>6,350,000</td>
</tr>
<tr>
<td>Cereal silage</td>
<td>25,000</td>
<td>100,000</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Greenfeed</td>
<td>100,000</td>
<td>125,000</td>
<td>3,750,000</td>
</tr>
<tr>
<td>Totals</td>
<td>7,046,400</td>
<td>5,240,000</td>
<td>$275,310,000</td>
</tr>
</tbody>
</table>

1 Information supplied by Manitoba Agriculture

Data in the 1992 Manitoba Agriculture yearbook indicates that tame hay production is about triple what it was 30 years ago. This has resulted from a doubling in acreage and a per acre yield increase of about 50 percent. At $275.3 million in 1991, forages (including pasture) represented about 20 percent of all field crop production value that year.
The $2.5 million of forages exported in 1991 represented less than 1 percent of the forage crop. The vast majority of the annual production is fed locally to livestock. Although the number of animals on feed in the province has been increasing steadily over the past eight years, the forage production capacity remains significantly higher than the in-province demand.

Forage seed production has increased five to ten fold over the past 30 years with the value of production peaking at $14 million in 1987. Production in 1993 is estimated to be down slightly from the previous year’s level. Approximately 80 to 90 percent of the forage seed produced in the province is exported.

Notable Industry Characteristics

Forage yields and quality are highly weather dependant and vary significantly from year to year. Even in good growing years, quality often is variable from bale to bale (i.e. almost every field has at least one weed patch). This variability makes it difficult to guarantee quality to a customer.

Forages provide valuable soil rejuvenation properties, and thus play an important role in crop rotation.

In Manitoba, forages traditionally have been viewed by the farming community as strictly an "on farm" source of feed and bedding for livestock. It generally has not been considered an "exportable" crop until the past few years. For example, forage valued at $30 per tonne in Manitoba, may be worth several hundred dollars per tonne in Japan. Because there has not been significant amounts of interprovincial or international trading of forages in the past, the industry has not received the technological support that other agricultural sectors have enjoyed.

Manitoba Agriculture staff produced a forage strategy for the province in 1987. This document has helped the industry focus on the development of export markets. A shortage of resources has prevented this document from being updated since that time.

Owing to a combination of the requirement for higher dollar returns per acre, environmental factors, and shortages of water for irrigation, total forage production has declined slightly in the U.S. over the past few years. There also has been a shift in production to northern and western states where the competition from other crops is lower. This occurred for both forages and forage seeds.

Manitoba recently introduced a forage certification program that can be used to identify relative feed value. The fact that less than 20 percent of the forage being exported to the U.S. is being tested for certification at this time indicates that value of this service is not yet recognized. The laboratory testing portion of this service is provided by Northwest Labs at commercial charge-out rates. Field inspection is carried out by MDA trained personnel on a fee for service basis.

The demand for forages in the U.S. is primarily for square bales. Manitoba’s production over the past 20 years has been focused on large round bales. A significant investment in equipment would be required to establish a mechanized square bale capability.

Manitoba currently has two forage pelleting plants and one alfalfa cubing plant. Two other groups are in the process of evaluating the feasibility of establishing a hay compressing business. Virtually all of the production from the alfalfa and pelleting plants is destined for offshore markets. There is little use of alfalfa cubes in the U.S. for feeding. However, a market has been identified for compressed hay and forage bales in the U.S.

There has been a shift in production philosophy in Wisconsin in recent years. Few dairy farms now try to produce their own feed. This shift in approach is affording Manitoba forage exporters greater opportunities
to capture a portion of the Wisconsin feed market. Some Manitoba forage producers (particularly those in the south-east corner of the province) are selling both hay and straw to dairy herd operators in Wisconsin.

Although there is currently a surplus of forage seeds in the world, Canada’s seed export prospects are favourable owing to the quality of seed we produce and our price competitiveness.

**Issues in the Forage Sector**

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the forage sector meeting or in follow-up discussions.

**Production Related Issues**

We questioned the attitude of Manitoba farmers regarding their view of forages and forage seeds as cropping options with potential for significant revenue generation. Although some farming communities see the potential for forage marketing, the vast majority do not. It is not essential, or even appropriate, that all producers focus on export markets. However, improved forage production practices and attitudes toward export potential would benefit both the export and domestic feeding businesses. The forage seed business is perceived by some within the province as one with good export potential, and thus good revenue generation possibilities.

A need was identified for more complete and timely information relating to forage production. Information is lacking because of the diversity of forage varieties, and the history of non-monitored on-farm use. Accurate forage production and quality data generally are not recorded. An increase in exports will necessitate monitoring of quality, which will result in better production information in the future.

Although advances in production technology have occurred over the years outdated production techniques are still in use in certain parts of the province. Pasture management is an area of particular concern. The answer to this problem lies, for the most part, in education.

Sector representatives were asked if there are significant gaps in production technology. Few problems exist with regard to agronomic practices. However, greater emphasis on varietal trials and selection would pay dividends through the identification of cultivars with improved yields and product quality. The time required to run field trials on new varieties has been too long to meet industry needs.

More testing of imported seed should be done to prevent inadvertent degradation of crop quality and disease characteristics.

**Economic issues** in production focused on inherent advantages or disadvantages which Manitoba farmers must face in competing in forage markets. Positive comments include the following: 1) cost of production is competitive and 2) product quality is good where proven management practices are followed and when the weatherman cooperates. Negative comments included 1) cost of transporting product to market is high, 2) variability of supply occurs owing to weather factors, 3) generally poor forage quality in areas where farmers fail to exercise appropriate weed control measures, 4) high cost chemicals are required to produce a consistently good quality products and 5) significant capital outlay is needed if quality is to be maintained from time of harvest to time of feeding in distant markets.

Sector representatives were asked if there are regulatory constraints to the development of the industry. Two major issues were mentioned. First, some of the herbicides and pesticides which work effectively and have been licensed in the U.S. are not registered for use in Canada. Second, U.S. trucking regulations restrict the hauling of double stacked round bales for most of the year.
Two environmental issues are apparent in the forage sector. First, forages are considered excellent cover crops which can serve to reduce soil erosion in susceptible areas. A second related issue is that forages help in restoring several key nutrients to the soil, thus playing an important role in crop rotation.

Processing Related Issues

Few technological constraints face forage processors. The basic processing operations such as dehydrating, pelleting, compacting, and cubing are well established. However, more sophisticated processes involving chemical fractionation and reformation into higher valued end products has had very little attention within Manitoba.

Two logistical problems are apparent in the processing of forages. First, in order to maintain the bright green colour of fresh alfalfa, dehydration must occur within hours after harvest. This would necessitate a number of smaller plants being distributed throughout the province if significant volumes of this product were to be produced. Second, variability of the weather causes severe production scheduling problems for processors.

Economic constraints in value-added processing of forage crops were discussed by sector representatives. The development of a lower cost drying system would be of significant benefit to the industry. The relatively short growing season often leads to higher drying costs in Manitoba than found in many U.S. locations.

Peak demand hydro billing is a definite impediment to entering, or expanding, the alfalfa business.

Packaging has not been a problem in this industry in the past. However, innovative packaging and shipping approaches may be necessary if Manitoba exporters are to be successful in capturing new markets in the U.S. or offshore.

No regulatory constraints which negatively impact upon forage processors were identified.

Marketing Related Issues

Forage producers and processors were asked if they encounter logistical constraints in moving their product to market. Because of the low density of raw forages relative to the value of the product, freight costs definitely pose a challenge for forage exporters. Also, the remote location of much of the production results in significant transportation costs. The necessity of routing all rail containerized product through Winnipeg hampers processors in the western part of the province in their attempts to capture business in Pacific Rim countries.

Some exporters have found it less expensive to ship to the U.S. by truck, and from there by rail to ocean ports. One processor claimed, "Canadian railways do not seem too interested in gaining the business".

In response to questions concerning new product market entries, participants reported that U.S. buyers were interested only in the quality and price. They seem to have no problems with feed coming from outside their country.

Market access suggests that smaller companies have had difficulty finding the right broker to represent them in foreign markets. It appears that this problem has been addressed and resolved for at least one exporter.

Forage sector representatives were asked who would be the primary competition a rural Manitoba company would encounter. Manitoba exporters have enjoyed modest success in capturing Pacific Rim business even
though their main Canadian competition (Alberta) is closer to the market. There also is a belief that Manitoba exporters can be competitive with Ontario in shipping into the U.S.

Neither CUSTA or NAFTA are expected to have any impact on this sector as trade has occurred in the past without any tariffs in place. Depending upon tariff levels, the GATT agreement may help the alfalfa dehydration industry in gaining access to the Japanese market. Access to the European market also may ease.

Transportation regulations were significant in this sector. The diminishing value of the "Crow benefit" over time will have an increasing negative impact upon the export of forages to eastern Canada (relative to foreign feed supplies). However, a move to compensatory freight rates should give Manitoba an advantage over Saskatchewan and Alberta in these same markets. Additionally, as a consequence of increased freight rates on the raw commodities, the potential for further processing of forages on the prairies would be enhanced. This will occur at an accelerated rate if payment of the Crow goes to the producer rather than the railways.

One general impediment to expanding value-added processing to forage is a reluctance within the private sector to invest in the research needed to develop this business. Even when market opportunities are identified, few, if any, entrepreneurs step forward to attempt to establish a business.

Forage Sector Analysis

Perhaps the most significant impediment to development in the forage sector is the general lack of appreciation on the part of producers of the potential this industry holds. Both value-added processing and export market development are possible given the production capabilities within the province.

A second impediment appears to be a lack of commitment to produce forages specifically grown to meet customer standards. The general approach is to offer surplus product on a "when available" basis. Supply contracting with adjustable pricing might be an option worth trying.

A third impediment relates to education of producers to new methods of handling the product. Equipment is available to bale, stack and transport square bales which would meet U.S. customer specifications.

A fourth impediment relates to the cost of production. Specifically, the relatively high cost of agricultural chemicals used in the forage industry contributes to increases in the cost of production. Farmer organized buying consortiums, coupled with additional research, and accelerated testing and registration of new agricultural chemicals may be useful in overcoming this impediment.

Development of the forage industry would be enhanced if the Manitoba Forage Council would update the long range strategy for the development of the industry in general and the value-added sub-sector in particular. The industry also would benefit through ongoing educational efforts aimed at increasing the understanding of modern production and handling practices throughout the industry. With some relatively simple field management practices, yields and quality could be increased significantly. The industry believes that potentially strong export markets could be realized as a result of these changes.
PULSES

Industry Scope

For purposes of this report, pulses include dry beans, dry peas, lentils and fababean. On an acreage basis, these crops combined represented just under 3 percent of the crop production in the Province of Manitoba in 1992. The farm gate value of pulses in 1992 was $53.8 million. This represented about 3.9 percent of the crop value in the Province. Approximately 2500 farmers are involved in pulse production.

Typically, about 85 percent of the crop has been exported, either as bulk product, or cleaned and bagged. Exports are destined to about 45 countries.

A breakdown of the pulse crops showing 1992 production and estimated 1993 production indicates a slight increase in production (Table 4). Dried peas and lentils account for most production in both years, but the proportions of the two crops shifted between years. The high production of lentils in 1992 has been attributed to the exceptionally attractive level of coverage from the safety net programs in that year.

Table 4. Pulse Crops in 1992 and 1993 in Manitoba

<table>
<thead>
<tr>
<th>Crop</th>
<th>1992</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acres</td>
<td>%</td>
</tr>
<tr>
<td>Dried beans</td>
<td>40,000</td>
<td>12</td>
</tr>
<tr>
<td>Dried peas</td>
<td>125,000</td>
<td>37</td>
</tr>
<tr>
<td>Lentils</td>
<td>165,000</td>
<td>49</td>
</tr>
<tr>
<td>Fababean</td>
<td>6,000</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>336,000</td>
<td>100</td>
</tr>
</tbody>
</table>

*Information supplied by the Manitoba Pulse Growers Association

The majority of the non-exported product is processed at Woodstone Foods Ltd., Portage la Prairie, into food grade pea products. Smaller amounts of seed are used for animal feed and as table product for soups and ethnic dishes.

Important Industry Characteristics

Beans are produced mainly in the south-central part of the province where there are higher heat units during the growing season. Lentil and fababean production is fairly widespread, but production is favoured in areas with slightly lower heat units. Peas are grown throughout the southern portion of the province. Yields of most legumes are highly variable from one year to the next owing to weather and disease factors. This problem is not unique to Manitoba. Irrigation is not used on pulse crops in Manitoba. Some irrigation is used in Alberta and in North Dakota.

Production has been shifting in recent years. Michigan bean production is declining while that in Minnesota, North Dakota, and Alberta is increasing. Ontario remains a major producer and processor of beans. Legumes are important in crop rotation because of the different disease harbouring profiles from cereals, and owing to their ability to fix nitrogen.
Both the export market and local processors are demanding high quality product. This puts a strain on the industry, particularly in years when weather problems occur. The industry is dealing with a serious quality problem caused by difficult weather conditions encountered this year.

In recent years researchers have been investigating the use of field peas in hog rations as a replacement for imported soy meal. The industry sees this as a critical new market for peas if significant expansion is to occur. Higher yielding European feed peas are gaining interest. Alberta has increased production of feed peas in recent years and is actively seeking export markets. Competition in the feed industry comes from soy meal originating at crushing plants in Minnesota. Prices on soy meal are competitive in the Manitoba market.

Pulse crops have been undervalued in Manitoba as a feed source. There is currently renewed interest in demonstrating the true feed value of peas.

**Issues in the Pulse Sector**

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the pulse sector meeting and in follow-up discussions. Information is presented for production, processing and marketing categories.

**Production Related Issues**

Manitoba pulse growers were asked if they have a positive attitude about their sector. In general there is a feeling of optimism. Although there can be significant weather related production problems, yields and return per acre are attractive. Export prospects continue to look positive. There is enthusiasm by some in the industry because locally grown peas may become a major component in hog rations.

There is a negative attitude toward the use of pedigree seed produced in the province. Those who purchase registered seed place more confidence in imported seed. To compound the problem, many pulse growers continue to use bin-run product for planting.

As pulse crop acreage increases in the province, there is an ongoing need for production related information. Because there are unique production practices required for growing pulse crops, most farmers entering the business require specific agronomic information and advice. Although much of the "know-how" currently used is available in Manitoba, other aspects are learned by farmers going to pulse grower meetings in the U.S. Information on agricultural equipment and some agronomic practices is accessed through the U.S.

Technological constraints faced by pulse producers were evident in that in spite of the significant research effort which has gone into pulse crops in recent years, a greater research effort is needed if Manitoba farmers are to remain competitive with other growing regions. The control of disease is an ongoing battle, and chemical treatments are a major production expense. The pea breeding program at Morden is valuable, but more varietal trials and development of effective and efficient disease control is needed to assure the long term viability of the industry. Because of the relatively high level of vulnerability of pulse crops to weather and disease related factors, the growers in the province would benefit from on-going production research programs.

There is a general belief that Agriculture Canada is becoming more responsive to producers' research needs, provided the industry is prepared to fund a portion of the research. This approach is welcomed by the pulse sector, even though there is some concern that this response is coming at the expense of basic research. The long term costs and benefits of using irrigation for pulse production in Manitoba has not been established. This would be valuable to know.
The economics of production relate to the ability to compete, on a cost per pound basis, with growers in other regions. Although it is still not certain, it appears that Manitoba farmers can compete with production elsewhere in the case of peas and lentils. The long term competitiveness of bean production is not known.

The most serious regulatory constraint facing production relates to grading of seed. Exporters appreciate the value of a grade certificate issued by the Canadian Grain Commission. However, the industry would like to see greater consistency and relevance in the grading process. There is consensus among exporters that markets have been jeopardized owing to year-to-year variability in the quality within a specified grade.

Several other regulatory constraints were mentioned. First, differences in the licensing process for agricultural chemicals in Canada and the U.S. were identified as a specific problem. Second, although the industry favours the introduction of breeders' rights, there is confusion regarding implementation. Regulations are being introduced in stages to cover all crops eventually. In the meantime, there is a grandfather clause that will protect breeders rights for all new varieties. Although this still is seen as an impediment by some, it can be overcome with explanation. Third, the question of bonding and licensing of dealers, which varies from east to west in Canada, is seen as a trade impediment. Finally, the year-to-year uncertainty relating to pulse crop safety net programs was identified as an impediment to the orderly growth of the industry.

Environmental issues, were not deemed significant in production because of the relatively small amount of crop residue remaining after harvest. Pulse growers, however, must consider crop rotation and land management practices carefully to avoid depleting the organic content of soil, and to avoid soil erosion.

Processing Related Issues

Two technological constraints face pulse processors. First, the R&D costs associated with fractionating and recovering seed ingredients can be substantial. This serves as a significant impediment to those attempting to enter the food ingredient or industrial feedstock markets. This impediment can be particularly challenging for pulse processors when public research is limited and the competition for markets is strong. Second, there is a lack of knowledge relating to the processing of pulses for use in today's "instant" food world. Research in this area at the University of Manitoba has shown some progress, but more effort is needed.

The major economic constraint to value-added processors relates to technology. Because pulse processing is limited, processing equipment is expensive. Most items require custom manufacturing, or, significant modifications of stock equipment.

No significant environmental issues, packaging limitations or regulatory constraints were identified by processors of pulse crops.

Marketing Related Issues

Two transportation (logistical) limitations were mentioned by pulse producers and processors. The greater distances and expenses in reaching off-shore markets is seen as an impediment to exporting from Manitoba. Also, pulse exporters report that containerized product destined for export markets, travels at lower rates in the U.S. than it does in Canada.

The receptivity of the market to new product entries involves two components. First, the attitude shown by local hog feeders that a pea/barley mixture is inferior to soy/barley rations is impeding the development of an important market for pulse growers. The fact that Manitoba feed peas and culls can compete with U.S. soy into the European feed market underscores the problem.
Second, the time required to prepare pulses for human use in restaurants and in home cooking have limited their food use in North America. Canadian consumption of pulses is about one-quarter of what it is in Europe. There is, therefore, a potential consumer demand if the current impediments can be overcome. To do this, we must develop niche market products that meet the North American lifestyle and palate. With Canada's food guide recommending higher intake of pulses, there would appear to be real opportunities in this sector. Some research has occurred in search of alternate ways of processing pulses to overcome this drawback, but the challenge largely remains unsolved.

The market access for a cottage industry in rural Manitoba is limited. Owing to the low level of consumer acceptance of pulses, and the relatively low price per pound, it would be difficult for a start-up company to enter either the retail or the Hotel, Restaurant and Institutional Trade with a traditional product. However, there could be significant potential for a small company to start on a small scale through supply of local restaurants, if a "user friendly" product could be developed. There appears to be real potential for rural processing and use of field peas in hog rations.

Market competition varies among potential products. A start-up company looking to enter the processed pea business would face strong competition from Woodstone Foods, a Manitoba company that has captured a large portion of the North American Market for field pea derivatives. There would be little competition, however, for a company entering the Hotel, Restaurant and Institutional Trade sector with a range of ready-to-eat pulse based products.

The impact of the CUSTA and NAFTA agreements on the pulse sector are unknown. Manitoba pulse exporters generally support free trade, and thus support both trade deals. Duty on product going into Mexico, and payment problems with Mexican importers, have been problems in the past. These impediments may be reduced under a structured trade deal.

Similarly, Manitoba’s pulse industry would welcome a reduction in trade barriers with other countries (e.g. GATT).

Domestic regulations that impact negatively on marketing in the pulse sector relate to transportation. The "Crow" rate favours shipping raw product over processed product, and thus is viewed as a true impediment to value-added processing within this sector.

**Pulse Sector Analysis**

A major impediment to market growth and value-added processing could be overcome through establishing the true value of pulses in animal rations. Part of the problem lies in the mind-set of some farmers and feed formulators. The myth that peas cannot replace soy meal must be dispelled. For their part, pulse growers must be dedicated to servicing the feed market as diligently as they do the food market. Pulse growers must work with canola meal suppliers and with local feed mills to assure balanced rations are developed and promoted for sale.

Development of a local feed market would give much needed depth to the industry. Pea exporters and processors would have greater flexibility in selecting quality product for the edible market. Development of feed pea markets in pacific rim countries also would give the industry greater marketing options and, therefore, greater overall strength.

In view of the anticipated increase in pest management problems, an active production research and pest monitoring program within the Province would provide a level of insurance against a major set-back to the sector.
Given the strong growth trends in both production and processing, and given that this growth has occurred largely without the aid of subsidies, the industry has proven its ability to be competitive in North American and World markets. Although past attempts to produce attractive pulse products for the domestic food industry have largely failed, there does appear to be opportunity to expand this market through a combination of research and marketing.
Similarly, poultry research has served the industry well over the past decade. There do not appear to be any significant technological impediments to production at this time.

Answers varied when egg producers were asked if they are able to compete, on a cost per unit production basis (economically), with producers in other regions. Manitoba producers are confident that they can compete with other Canadian provinces, but they are not convinced they can compete with the large vertically integrated operations in the U.S.

No regulatory constraints other than those involving supply management were identified by producers.

No environmental issues were identified by producers in Manitoba at this time. However, production in the U.S. has shifted away from large urban centres owing, in part, to environmental and animal rights issues.

Processing Related Issues

Egg processing is technologically relatively sophisticated, and would pose a challenge to entrepreneurs seeking to enter this business. Existing processors face significant technological constraints, but both companies are actively researching ways to overcome these challenges. They would welcome government financial assistance for their own research programs, or for added basic research on egg quality and nutritional attributes.

The major economic constraint faced by egg processors is difficulty in obtaining raw product. This has to some degree hampered expansion of the sector. Although processors are free to import eggs for processing and subsequent exporting, the added freight coupled with some product and quality loss during transit result in a degree of loss in competitive position in the marketplace.

From an environmental perspective, waste products must be treated prior to disposal to avoid the spread of potentially harmful bacteria. As this is standard practice in the industry, it is seen as an additional operating cost, rather than an impediment. Although polystyrene egg cartons are being recycled, they still present a significant environmental challenge.

No packaging problems are evident. In fact, packaging companies have assisted processing companies in developing new products.

Food and Drug regulations are stringent in this sector. However, the government officials are working with companies to reduce unnecessary effort while still maintaining needed safety standards. Start-up companies may find the regulations an impediment owing to the added capital and learning costs involved during the first year of operation. Established processors welcome the tight regulations, but stress the need for imported materials to meet the same sanitary standards.

Marketing Related Issues

No logistical problems are experienced by egg producers or processors in moving their product to market. Export Packers has virtually eliminated the freight factor because of the exceptionally high price and low volume of their fractionated products.

Within market demand, this is not an industry that lends itself to cottage industry. In addition to the technological and economic constraints, there would be significant challenges in capturing markets. If the cholesterol problem can be successfully resolved, there could be a significant increase in market demand for novel, ready-to-eat products.
Market access, therefore, is limited. It is unlikely that a cottage industry will emerge in rural Manitoba given the current marketing system and technological challenges.

Competition for value-added products comes primarily from vertically integrated U.S. companies. The current price advantage enjoyed by these large companies remains a challenge to overcome. In addition, a start-up company would face severe competition from the two processors currently operating within the province.

Representatives of the egg sector were asked if the Canada/U.S./Mexico free trade agreement would have any effect on the sector. The question as to whether NAFTA or GATT takes precedence is currently under discussion. If NAFTA takes precedence, then the current marketing system will remain in place. Should there be international agreement to reduce subsidies around the world (GATT), Canada’s supply management system may be sacrificed. It is unclear what effect this would have on the Manitoba egg industry. With the tariff levels being discussed, the industry would retain ample protection for the foreseeable future from cheaper U.S. product.

Egg Sector Analysis

Perhaps the greatest impediment to expansion of the table egg industry in the province is the change in lifestyle which has consumers looking for convenience foods. Concern over the potential health hazard which dietary cholesterol may cause also has contributed to the reduction in egg consumption. Solutions to the change in lifestyle may not be found. Solutions to the cholesterol problem will come through continuing nutritional research coupled with breeding and processing research.

Expansion of export markets of processed product is contingent upon several additional factors. If processors can continue to develop novel food and non-food products from eggs, as they have in the past, additional market expansion could occur. Similarly, expansion of Manitoba’s egg processing industry could occur if producers were prepared (and authorized) to supply larger quantities of breaker eggs at a competitive price to those imported from the U.S. Whether or not this can be done at acceptable profit levels to the producer remains to be seen.

The direction the industry takes in the future will depend to a considerable degree upon the outcome of the GATT negotiations currently in progress, and upon possible agreement among provinces to lower or eliminate inter-provincial trade barriers. If changes to Canada’s supply management system are required, Manitoba’s egg industry could see significant structural changes over the next 10 years. There is a general belief that the Manitoba egg industry would expand if egg production quotas were lifted.

There do not appear to be significant opportunities for new value-added processing to occur in rural Manitoba. Expansion of existing processing operations is possible, and in fact, is currently in progress.
POULTRY

Industry Scope

In 1992, Manitoba produced a total of about 19 million chickens, 1.6 million turkeys, 185,000 geese and 4,000 ducks. Farm cash receipts for Manitoba produced chicken in 1992 were $36.3 million. The total farm gate value of poultry was $56.6 million. Manitoba currently produces 3.75 percent and 8 percent respectively of the chickens and turkeys slaughtered in Canada each year. Manitoba currently has 137 chicken producers and 76 turkey producers. There is currently a regulated maximum limit of 800,000 chickens per farm. The 1992 average Manitoba farm size was 214,000 kg (live weight), which was 70.6 percent of the national average. In the U.S., 96 percent of production comes from vertically integrated operations. In Canada, 95 percent is produced on private farms.

There are six federally inspected processing plants and three provincially inspected plants located in Manitoba. Three of these plants are located in Winnipeg.

Eight years ago 80 percent of the poultry sold at the retail level was frozen. Today, 80 percent is sold fresh. The 1992 use of chicken in Canada was as follows: retail, 62.3 percent, fast food, 24.7 percent, full service restaurants, 8.1 percent, institutions, 4.9 percent. Chicken imports into Canada have risen from 30.2 million kg in 1986 to 47.0 million kg in 1992. By Canadian Chicken Marketing Agency (CCMA) regulation, the total imports cannot exceed 7.5 percent of the previous year’s production. The limit for turkey imports is 3.5 percent of the previous year’s production.

Notable Industry Characteristics

Production and marketing control of chickens and turkeys come under legislated control of the Manitoba Chicken Producer Board, and the Manitoba Turkey Producers’ Marketing Board, respectively. Geese, ducks, pheasants, and other game bird species, do not fall within the Manitoba Farm Products Marketing Act, and can be produced domestically without restriction.

Production quota can be obtained in three ways. First, if Manitoba receives increased quota from the Canadian Marketing agencies, it can be allocated to new and existing producers. Second, a farm with quota can be purchased, in which case the quota can be switched to the new owner. Third, quota can be bought on a quota exchange. Although this third option has been available in Manitoba since June of 1991, no transactions have occurred to date. Manitoba’s quota has fluctuated over the years reflecting the level of consumer demand and the balance between imports and exports. As chicken consumption has risen, additional quota has been given to existing quota holders. No new quota permits have been issued to Manitoba producers over the past five years. The Manitoba Chicken Marketing Board currently has 400 people registered as desiring production quota should it become available.

In spite of the fact that certain sub-sectors of the Manitoba poultry industry have shown good growth over the past few years, there is a high level of apprehension owing to uncertainty of the outcome resulting from the recent GATT agreement.

Friction is apparent in the industry because of differences in opinion regarding the value of the supply management system. Some believe that without the protection afforded by the supply management system, our poultry industry could be wiped out by large international firms. Most of these firms are vertically integrated and, therefore, able to control farm gate prices artificially. There is fear that the large U.S. companies would be prepared to operate at little of no profit until the competition folds.

3 Information presented in the Data Handbook of the CCMA.
The current system has been successful in meeting one of its prime objectives. It has kept production on the family farm. In Minnesota, where supply management is not practiced, the number of turkey producers has dropped from 300 to 30 in the last 10 years. The remaining producers in that state are all linked to multi-nationals.

One of the original objectives of supply management was to shift production to the province which had the lowest cost of production. Manitoba has been at or near the top of the list in recent years as a least cost producer of chickens. Unfortunately, in spite of this, efforts to raise the quota from 3.75 percent have been unsuccessful.

Significant gains in production efficiency have been made over the past decade in rearing both chickens and turkeys in Manitoba. The time from hatching to market for turkeys has been reduced from 45 to 29 weeks over this period. Chickens now reach market weight in about 8 weeks, as a result of an intensive breeding program over the last few years. CCMA data indicate cost share of 1992 COP components as follows: Feed 46 percent, chicks 22 percent, operating 13 percent, labour 11 percent, and capital 8 percent.

Due to current extra capacity within Manitoba, production could be doubled within weeks if there were markets to consume the added product.

Per capita annual consumption of chicken has increased over the past 20 years from about 13 kg to 23 kg. The consumption of turkey has increased slightly over this period and currently stands at about 4.7 kg per person. The large per capita increase in chicken consumption has been almost entirely at the expense of beef consumption. Poultry now constitutes close to one-third of the meat consumed in Canada.

In spite of increases in poultry consumption, the provincial processing industry has considerable competitive pressure given the number and aggressiveness of the companies involved in the business. Poultry processing is a capital intensive-industry because all stainless steel equipment is required. Operating costs are high due to the significant amount of hand labour and the level of plant sanitation which must be maintained.

Much of the growth in the local processing sector over the past 10 years has been in value-added niche market products (i.e. chicken kiev, nuggets, fingers, etc.). However, in the past year or two, an increasing percentage of these products is being imported into the province without import duties being applied. Large U.S. and Canadian companies dominate the "mass market" products. It would take major investments to break into the Kentucky Fried Chicken or McDonald's McNuggets business. There has been some industry change in Ontario where some producers have come together and purchased processing facilities.

Processors claimed that because of the level of competition currently in the industry, none are in a position to spend much on R&D. Production research is funded in part by funds made available through the marketing boards and in part through public grants.

Processors claim their costs are comparable to those in the U.S., but the price of the birds to the killing plant is substantially higher here, representing 70 to 80 percent of the cost of the dressed bird. This one factor makes it virtually impossible to compete in U.S. markets.

**Issues in the Poultry Sector**

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the poultry sector meeting and in follow-up discussions.

**Production Related Issues**

When asked if they see potential for significant growth, poultry producers are protective of the current system. They recognize that the system does not encourage growth, but it provides a secure income for those who hold quota. They see far more risk than benefit in trying to compete head-on with U.S. farmers.
Generally producers receive information on a timely basis from their marketing agencies and from extension workers. Similarly, the University of Manitoba has had an active production research program operating for several decades and poultry farmers are served well technically.

Industry leaders are of the opinion that in the long run, Manitoba should be able to compete on a cost basis with any other producing region on the continent. We are consistently the lowest, or second lowest, cost producer in Canada. There is a general feeling that our supply management system has shielded producers from the competitive U.S. industry, and that they have not faced normal market pressures to increase production efficiencies. As a result, there is consensus that the production sector may not be competitive on a straight commercial basis with U.S. production.

The major regulatory constraint to the development of the industry relates to transportation. The cost of production of poultry in Manitoba would be reduced if the regulated freight rates on grains were eliminated.

Two environmental issues were mentioned for poultry production. First, intensive rearing of birds can lead to environmental and animal health problems. However, the challenges should be no worse in Manitoba than they are elsewhere. In fact the dry climate might be a plus in keeping disease in check. Second, rearing methods have been questioned by animal rights activists.

Processing Related Issues

The poultry processing industry is technically challenging, but the constraints generally are being adequately addressed by existing companies. A start-up company would be wise to spend considerable time learning poultry technology prior to entry into the market. The economic constraints to value-added processing, however, are more difficult to overcome. By far the most significant constraint facing the processor looking at export markets is the high price of the birds relative to that paid in the U.S. At a premium ranging from 20 percent to 50 percent over the U.S. price, the export market is virtually unattainable. On the positive side, there currently are significant upward pressures on the price to the producer in the U.S.

The major environmental issues which processors must face involve considerable effort in managing plant effluent to avoid costly surcharges in water bills and solid refuse removal costs. Packaging is not a problem in this industry. Regulatory constraints which negatively impact upon poultry processors relate to the strict plant sanitation regulations. These are welcomed by existing processors and the consuming public, but can serve as a major challenge to a start-up company.

Marketing Related Issues

Being a highly perishable product, a small, rural processor would face significant logistical challenges in meeting fluctuating market demands. Similarly, given the intense competition currently in place, a new processor would encounter great difficulty if breaking into the market unless the product(s) had unique attributes or a price advantage.

In addition to the logistics and market demand problems previously mentioned, the handling of a highly perishable product, like poultry, would cause real challenges to a start-up cottage industry. A small company would face problems in selling to larger restaurants and chain stores, most of whom would be reluctant to try a new supplier for a perishable product. The market access, therefore, is severely restricted for small processors in rural Manitoba.

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Primary competition would come from the existing processors in the province as well as from some of the large multi-nationals. Only a truly novel product could break into the current market format.

The Canada/U.S./Mexico free trade agreements could affect the poultry sector. Given the current situation where farm gate prices in Canada are uncompetitive, Manitoba could lose a portion of the domestic market if other means of price protection are not put in place. The U.S. export enhancement program was cited as an additional roadblock to industry growth. An international agreement to reduce subsidies around the world (GATT), may or may not be advantageous to Manitoba. If supply management is sacrificed under the GATT agreement the poultry industry in Canada would undergo significant structural change. If Manitoba producers and processors could react favourably to change, it could be to their advantage in the long run. It is also possible that a change in the supply management system without these operational changes occurring, or without adequate safeguards being put in place, could spell the end of operations for many producers and processors.

One domestic regulation is impacting negatively on the poultry sector. The absence of import duties and quotas on highly processed niche market products is causing problems for local processors. Companies holding import licenses are opting to fill their weight-based allocation with high valued processed products rather than lower valued, unprocessed birds.

**Poultry Sector Analysis**

As with other supply managed sectors, the poultry sector will continue to provide good returns on conventional products provided the public continues to purchase these products at current quantities and prices. A vulnerability exists for the processing sector if a greater swing to highly processed products should occur, as these products may constitute the bulk of the allocation of imported product.

If the industry decides not to place further restrictions on imported processed products, or if there is a desire to become a net exporter of poultry and poultry products, then there must be some mechanism brought into play whereby processors can obtain raw product at sufficiently low prices to allow them to become competitive in these markets. Absence of change will result in a stagnant, or shrinking, value-added processing industry. Given the size of some of the large U.S. processors, Manitoba’s fairly small population base would not be much to build on even if one company had the entire market. Thus if we are to be competitive in North America in a regulation free environment, we must either have a competitive edge at the farm gate, or a rationalization of processing.

Given the potential vulnerability of the entire industry if the supply management system were to be removed, the industry should continue to work closely with the provincial government to allow alternate approaches to be implemented quickly should the need arise. It is particularly important that the poultry industry push for an early resolution to the feed freight issue to allow feed costs to be reduced. Of equal importance is the need to critically examine production practices with the aim of identifying ways in which efficiencies can be achieved.

Should some way be found to reduce the price of the birds to the processors, there would be potential for significant growth in value-added products. Given the current compliment of processors, and the challenges which a start-up company would face, it is reasonable to assume that most, if not all, growth would be achieved by existing companies.

Perhaps the greatest opportunity for rural entrepreneurs looking to enter this sector would be in raising game birds such as pheasants, grouse, partridge, game hens, etc. Effort must first be placed in identifying and assuring markets before significant research or production expenses are incurred.
HOGS AND PORK

Industry Scope

Approximately 2,000 commercial hog producers currently are operating in Manitoba. This represents about 7 percent of the hog producers in Canada. Manitoba producers market about 2 million hogs per year. This compares to about 15 million for all of Canada, and about 85 million for the U.S. Close to one-quarter of the U.S. hogs are produced in two states (Iowa and Minnesota).

Current annual sales of domestically produced hogs total about $250 million at the wholesale level. About 70 percent of this total is exported from the province as live animals, carcases, or primal cuts. Live animals are destined primarily for other parts of Canada, whereas carcases and primal cuts go mainly to the U.S. and Japan.

Processing in the province is carried out at four major federally inspected plants and about a half dozen small provincially licensed plants. A detailed review of the Canadian hog and pork sector, with respect to competitiveness with the U.S. industry, has been produced by the SCI Sparks Companies, Inc.  

Industry Characteristics

The Manitoba hog industry has undergone steady and significant growth over the past 15 years. Growth has occurred as a result of consistently high quality and a reputation as a reliable supplier. Low feed costs, availability of quality breeding stock, favourable weather, modern equipment, and production know-how all contribute to internationally competitive prices at the farm gate. There is a belief by some that Manitoba is (or could become) the lowest cost producer in North America.

Industry leaders recognize that current production efficiency advantages may not continue indefinitely. There is consensus that greater emphasis on secondary processing would help in sustaining current export markets and in developing new markets. Manitoba is a significant supplier of genetic stock for other producing regions.

All live hogs are marketed through Manitoba Pork which operates under provincial regulation as the sole selling agency of live hogs in the province. The industry operates with little government funding compared with other agri-food sectors.

The U.S. has set an objective of making up the 10 to 15 percent pork deficit at which they are currently operating. The objective is to accomplish this through a gradual shift to larger farm units, improved genetic stock and through a consumer-downward supply chain management approach. If the roughly 10 million animals equivalent of deficit make-up comes solely at the expense of Canadian exports to the U.S. this could have devastating effects on Manitoba’s pork export industry. Canada must continue to increase efficiencies within the industry and continue to pursue an aggressive marketing approach, or face shrinking exports as the American industry expands. These constraints may not apply to other current or potential international markets (eg. Pacific Rim nations).

Issues in the Hogs and Pork Sector

The following issues relating to the potential for increased value-added processing within the province were raised at the hogs and pork sector meetings.

Production Related Issues

Hog producers generally have a positive attitude about their industry. They have seen excellent growth in the recent past and believe it will continue provided further U.S. import restrictions are not encountered. There is a belief by some industry leaders that hog production in the province could double if there was a cohesive approach to the development of the industry. Some believe that with an aggressive approach, Manitoba pork products could be shipped to markets around the world.

There is, however, considerable pessimism expressed regarding the ongoing threat of unilateral trade sanctions by the U.S.

Manitoba hog producers believe that they will be able to continue to produce a quality product at competitive prices through the year 2000. Our current lead on others may diminish over time. Cost competitiveness will depend upon feed freight policies and the relative balance of other government programs on each side of the border. The respective values of the Canadian and U.S. dollars also have a major impact upon the competitiveness of the Canadian industry.6

The Hog industry is not opposed to more strict environmental standards as long as their competitors are required to meet the same standards. Concern was expressed that the U.S., Mexico and other countries will not introduce new standards as quickly as will Canada. Producers must address the manure disposal issue in a responsible manner to avoid contamination of land and water resources.

The industry sees technology as a current strength and is using it to advantage. However, concern was expressed about reductions in our research efforts and the long term negative impact this will have.

From a regulation viewpoint, municipal governments currently are able to block development of new hog operations even when provincial and national standards appear to be met. Concern was expressed over both the cost to the entrepreneur and the time delays involved in meeting environmental regulations. To some degree the feed freight assistance program which underwrites some of the costs of moving feed from areas of surplus to areas of deficit are causing inflated prices within Manitoba.

Process Related Issues

Environmental constraints relating to processing of hogs cause industry concern, but only if the adoption and enforcement of new regulations is not done in harmony with competing jurisdictions. Animal wastes no longer can be dumped in refuse sites, so people looking to get into the hog slaughtering business must address this issue. Also, hog slaughtering facilities must be located away from residential areas owing to potential odour problems.

Some economic constraints are faced by value-added processors in this sector. The major packing houses face global competition, and therefore must be highly competitive to survive. The primary factors influencing

6 Industry leaders were questioned as to the level of the Canadian dollar as which the two countries would be equally competitive, but due to the virtual impossibility of determining this figure, they declined to speculate.
their costs include price of live animals, labour, taxes, utilities, and economies of scale. The major corporations are not confident enough about their current and future level of competitiveness, to justify expansion of their processing facilities in the province. Specifically, they site non-competitive labour, utilities, and taxes as impediments to expansion in Manitoba. They also contend that their cost of live animals over the past few years indicate either higher cost of production than has been claimed, or higher producer profits than experienced elsewhere.

Small rural based pork processors enjoy lower costs for labour, taxes and perhaps utilities. On the other hand, financing charges and economies of scale serve as prime impediments to small processors.

Representatives from the larger companies report they are not restricted by a lack of technology. This is not necessarily true for smaller companies or entrepreneurs entering the business.

Packaging is not an issue in this sector. Because specialty meat products are sold in a variety of flexible packaging films, and because these are available at competitive costs within the province, packaging costs should not pose a problem.

The industry was asked if regulations by a single selling agency, which provides processors with a secure supply of hogs, but which also can result in a lack of flexibility for some processors, is the best approach for the province in the long run. The answer to this complex issue depends upon who is being asked the question. Processors generally find the system too restrictive, whereas producers generally support the single selling desk concept.

Within these two groups, however, there are differences of opinion on the best approach. The larger processors believe they could be more market responsive, especially with regard to quality, if they were allowed to contract directly with producers for unique breeds and classes of animals. Limited direct producer contracting is allowed under the Ontario marketing system.

The strict regulations regarding processing plant construction and operating procedures may serve as an impediment to companies wanting to enter the export business. Again, however, the degree of concern depends upon who you ask. Those knowledgeable in the industry understand that it is the trade and government officials in importing countries that set the standards to which all exporters must comply, not our own governments. It is unlikely that these regulations will be significantly changed to facilitate international, or even interprovincial trade. However, should plants currently licensed for provincial trade be allowed to ship product to other provinces in Canada, this would be to their advantage, or disadvantage, depending upon their relative level of efficiency.

**Market Related Issues**

The industry was asked if a rural based processor would face impediments in transportation of product to market. Shipping small quantities of fresh product which require refrigeration results in significant incremental freight costs. However, higher valued processed products, which have a longer shelf life, would not be as disadvantaged by freight as would be commodity products.

A new processor would face significant competition from the existing processors operating in the province. Success would depend upon price, service and the unique aspects of the product.

No regulations were identified which negatively impact upon the marketing of pork products.

The effects of the Canada/U.S. free trade agreement generally have been positive in this sector for Canada as we have been vindicated on two of three disputes since the agreement went into effect. However, the
threat of unilateral U.S. countervail duties being applied against Canadian imports continues to have a negative impact upon Canadian pork exporters.

It is too soon to tell if NAFTA will help or hinder. However, there is concern that Mexican trade quotas might be set based on past levels of trade. This could restrict Manitoba from developing this potentially advantageous market.

An international agreement (GATT) to reduce subsidies around the world, would be advantageous to Manitoba. Export subsidies by foreign suppliers (specifically Denmark) hurt Manitoba's ability to compete internationally.

Market access for a cottage industry in rural Manitoba would depend upon the uniqueness of the product, the market introduction strategies, and upon the ability of the company to respond to defensive reaction from competitors.

Market demand for new entries on the store shelf faces a very competitive meat business. The chances of a new company making significant inroads into traditional markets are slim at best. The greatest potential lies in the convenience and/or gourmet food areas. Long term success may depend upon establishing markets in the U.S. and Asia where the image of Canadian pork products is good. The industry has identified the export market as the target for future expansion.

Hogs and Pork Sector Analysis

The current value of the Canadian dollar (ie. approximately $0.75 US), coupled with product quality strengths of the Canadian industry, suggest there is potential for growth in export sales in the short run. Longer term prospects are less clear. Sales to the U.S. will depend upon a combination of production/processing efficiencies, the relative value of the Canadian and U.S. dollars, and the absence of unfair trade practices.

Substantial quantities of exports to Pacific Rim countries will occur only if the industry continues to adopt innovative production and processing technologies, and if researchers can find processing techniques for chilled products which will guarantee a minimum shelf life of 40 days. The success of the industry also depends greatly upon the degree of success that governments around the world achieve in establishing and maintaining fair trading practices.

The future of Manitoba's pork processing industry has been put in some jeopardy owing to the recent sale of Gainers Meats to Burns Foods Ltd. Should Burns decide to consolidate its pork processing in one large Alberta plant, there is risk the St. Boniface facility could be closed.

It is essential for Manitoba hog producers and processors to work diligently in overcoming differences in marketing philosophies and in finding new ways of working together to capture and maintain export markets. The system should be flexible enough to allow companies to react quickly to niche market opportunities and to technological breakthroughs.

In the short run, the greatest opportunity for value-added in rural Manitoba lies in the potential for greater quantities of hogs being raised on farms. Care must be shown, however, as it is clear there is a trend away from small, labour intensive production units to larger, more mechanized units which capture an economy of scale.

If new hog facilities are to be built without costly delays and frustration on the part of entrepreneurs, the provincial government must clarify the jurisdiction of municipal governments regarding the authorization of building permits. Similarly, governments must be clear and concise on environmental matters. Start-up companies cannot be left wondering if they do, or do not, comply with the latest regulations.
Given the overall strength of the industry, there may be opportunities for entrepreneurs, or small processors, to find niche markets for specialty pork products. Considerable caution must be exercised because of the high capital costs involved in setting up a government approved processing facility. Also, anyone thinking of entering this business must understand the economies of scale achieved by the large packing houses if they chose to enter the niche market which an entrepreneur has spent time and money developing.

Opportunities for value-added processing in rural Manitoba appear to lie more with the production of specialty table-ready products than with slaughtering and primary processing. The potential for slaughtering and processing greater quantities of hogs in rural Manitoba may be enhanced should the province decide to move away from a single selling desk to an open market approach. A rural processor may be able to work more effectively with local producers than would a multinational located at some distance from the farm.
BEEF, LAMB AND "EXOTIC" MEATS

Industry Scope

Production of beef cattle in Manitoba in 1992 numbered 491,000 animals, up 6.5 percent from the previous year. The farm gate value of production was $345 million, up $20 million from the 1991 figure. The total number of beef cattle and calves on Manitoba farms as of July 1, 1992 was estimated to be 1.167 million.

Approximately 90 percent of the production was marketed commercially. Of this amount, about 42,500 head, or 10 percent, were slaughtered within the province. Of the 400,000 head exported, about 57 percent were shipped as feeders and 43 percent shipped as slaughter cattle. About 60 percent of live animal exports was destined for U.S. markets, with the remainder going to other provinces in Canada. A smaller, but still significant number of slaughter cattle were imported into Manitoba in 1992 for processing at Manitoba plants.

The overall average price of slaughter cattle in 1992 was $63.29 per 100 lbs. Average prices for cattle types ranged from a high of $81.35 for A1, A2 steers weighing over 1000 lbs., to a low of $51.45 for D4 cows. These values were up about 1-2 percent from the previous 5 year average.

The historic value of cattle produced in Manitoba has increased from about $50 million in 1958 to $345 million in 1992. During this time, the number of animals marketed increased from 358,000 to 491,000. The value per market weight animal, which was less than $150 in the 1950’s, has climbed to over $700 in the 1990’s.

Manitoba’s breeding stock of ewes has been estimated at 17,700, an increase of over 50 percent since 1987. The value of lambs at the farm gate in Manitoba is about $2.7 million annually. About 500 farms raise lambs for commercial sale. The number of sheep per farm ranges from a few animals to as many as several hundred head. The average flock size is 35 ewes. Manitoba exports about one-quarter of the total live sheep and lambs from Canada. The vast majority of these are destined for U.S. markets.

A total of 36 red meat slaughtering plants currently are operating within Manitoba. Six of these are registered federal establishments with the remaining 30 being provincially inspected plants. Some of the slaughtering plants also do processing.

A total of 19 federally inspected meat processing plants are registered in Manitoba. It should be pointed out that most of these plants are involved primarily in processing food products other than meats. However, as these plants ship product out of province, they must be registered if any meat products are used as ingredients in their products. The largest meat plant, which is owned by Burns Foods Ltd., processes about 1000 cattle per week.

Notable Industry Characteristics

During the past three years, this sector has undergone detailed analysis by the Manitoba Red Meats Forum Inc.

Prior to the closure of the Swift’s and Canada Packers plants in Winnipeg in the early 1980’s, Manitoba was one of the major beef processing regions in North America. Most of the processing that had been done in Manitoba has migrated to Alberta. A number of reasons have been given for this shift, including financial

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7 For specific information on this Forum, contact Dr. Bob Richmond, Manitoba Agriculture.
incentives from the Alberta government, availability of assured supplies of quality water, proximity to markets, and a positive business climate.

Industry leaders believe Manitoba is competitive at the producer level. The fact that cattle numbers are increasing even though farmers face added freight costs in shipping cattle to market, testifies to Manitoba’s level of competitiveness at the farm gate. Cattle can be shipped 600 to 700 miles south to U.S. slaughtering plants without any problems. The incremental freight cost is about $20 per head.

In view of the significant business done in the U.S., the Canadian Cattlemen’s Association will abandon the tripartite beef stabilization plan for fear that its continuance might lead to U.S. countervail duties being applied. The industry is looking at implementing a whole farm stabilization program which should be deemed “green” under the terms of the CUSTA.

Some people shy away from cattle production because of fluctuating selling prices. Futures markets and buy/sell options are available to cattle producers, but use of these price stabilizing mechanisms is much less in Canada than it is in the U.S. In recent years, there has been increased activity in co-operative feeding arrangements where ownership of the cattle resides off-farm. This approach has worked well in Alberta where 50 to 70 percent of cattle ownership is of this type.

Manitoba beef is of recognized high quality as testified by repeat sales in established markets. The smaller regional kill and processing plants serve to supply local niche markets. These facilities also serve a role by handling atypical animals.

Both provincial and federal legislation prohibits the processing of meat products for commercial sale without the presence of a qualified provincial or federal meat inspector. Under provincial regulations, meat plants are allowed to do processing and commercial selling in the same facility. In some cases, it is this vertical integration that allows sufficient profit for the owner to stay in business. Federally inspected plants, however, preclude this practice.

Price pressures on dressed carcasses is coming from Alberta owing to kill floor efficiencies in their large modern plants. Manitoba’s small rural abattoirs also have difficulties competing with the larger Winnipeg plants. Some small plants have survived on custom killing and in handling cattle specifically raised for niche markets. Others are surviving on their customer service and niche market value-added products.

A national beef check-off program for research, development and promotion soon may be in place in Canada.

A reduction in per capita consumption of beef in recent years has resulted in increased competition and reduced profit margins.

Manitoba’s lamb industry has been described as being fragmented. The industry ranges from small hobby farms to a few large commercial operations. The result of this is a considerable variability in animals offered to the processor. The supply of lambs also is variable to the point where, at some times throughout the year, fresh domestic lamb is unavailable in local stores. The majority of lamb consumed in Canada comes from either the U.S. or New Zealand. The quality of domestic lamb is generally considered to be superior to imported lamb.

8 Anyone thinking of entering the meat processing business must first become fully conversant with all government regulations pertaining to the safe processing, storage, and handling of meat products.

One of the fastest growing segments of the red meat industry is in raising "wild" or "exotic" animal species. There is a growing number of wild boar, buffalo and other non-traditional species being farmed in the province. Unfortunately animals destined for export are being shipped to the U.S. or Saskatchewan for slaughtering as there are no federally inspected plants willing to handle the small quantities currently raised in Manitoba. Some local processing of wild boars is done in provincially inspected plants for the Manitoba market.

Issues in the Beef, Lamb and Exotic Meat Sector

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the beef and other red meats sector meeting and/or in follow-up discussions.

Production Related Issues

The attitudes of beef farmers appear mixed. Some are sceptical in view of the disruption that government incursion can have on the normal growth and development of the industry. Others are optimistic about the future based upon the competitive cost structure currently enjoyed within the province. There is a very positive attitude towards growth in the lamb sector. There are mixed thoughts about the future of rearing other animal species in the province but, in general, the attitude is positive.

Farmers, and others thinking of investing in cattle production, need better information on the value of using the commodity markets. This important tool in risk management is missing in most cattle operations in Manitoba.

In terms of production information, cattle farmers have been well served by government, trade, and university information sources. However, information on how to attract off-farm investment in cattle operations may be lacking. The lamb and exotic breeds industries would benefit from increased access to information in the respective sub-sectors.

No technological constraints were identified for cattle or lamb rearing. Exotic breed farmers seek technical knowledge either from out-of-province sources or from their own experimentation or investigation.

There is a strong feeling within the industry that Manitoba is a good location (economically) for cattle production. There is consensus that on-farm production costs are competitive with other locations in North America. Lamb production is not as efficient as it could be owing to the small average flock size. Should numbers increase, there is no reason to believe Manitoba producers could not be very competitive in most North American markets. The cost effectiveness of producing other animal breeds is not known.

Among regulatory constraints in production, the Crow benefit rail subsidy was identified as the major impediment to development of this sector. The industry estimates the negative impact of the existing regulations to be about $20 per head on Manitoba cattle relative to Alberta cattle.

The only environmental constraint mentioned was that care must be taken in locating feedlots to avoid ground water contamination. This problem, however, is no different here than elsewhere.

Processing Related Issues

Start-up companies may face significant challenges in developing sufficient understanding of some of the technological aspects of meat processing. In recent years, the Canadian red meat industry has been challenged to produce a chilled product which would have a shelf life of at least 40 days to allow exporters
to compete in the Japanese market. Indications are this technology is now available in Canada for commercialization.  

Some economic constraints do occur in value-added processing in this sector. Processors seeking registration as a federally inspected processing plant, would face considerable expense in meeting construction, equipment, and operating standards. Even provincial standards, which are less stringent than federal standards, require significant capital expenditures. Similarly, processors seeking product upgrading or new product development often face significant capital and/or time investment.

The significant environmental issues facing processors relate to waste management. If a major plant was located within the province, considerable study would be required regarding water availability and waste treatment. Smaller start-up plants would face similar challenges in dealing with waste management given current expectations and regulations.

Understanding packaging options would pose some challenge, but materials and technical assistance are available.

Two regulatory constraints were mentioned by red meat processors. The restriction of marketing outside of the province, based upon plant licensing standards, is seen by some as an unnecessary impediment. Also, the strict legislation governing plant and equipment sanitation is seen as an impediment by some. Most processors, however, see this as a necessary and important part of doing business. Some believe that USDA officials are far less tolerant of deviations from the "book" for Canadian plants than they are for U.S. plants.

Marketing Related Issues

The transportation system for live animals has been developed and is not viewed as a constraint in marketing. Because of the perishability of the product, however, smaller plants encounter some logistical problems. Most have their own delivery vehicle. Although this allows needed flexibility, operating costs can be substantial.

Given the wide range of processed meat products currently on the market, unless a new entry is superior in some way, there would be little market demand outside the local processing region. It is possible to find new and expanding markets for novel products made from lamb and exotic breeds. These industries require the development of a comprehensive marketing strategy for all products from live animals to consumer packaged products in order to create significant market demand.

Given the current product range, and the brand loyalty which consumers show in the red meat industry, market access could be difficult for all but truly unique new products. Cottage industry in rural Manitoba would have difficulty entering anything but a quality niche market.

Market competition comes from large and small companies currently operating within the province. Product from the U.S. and other foreign countries also has been offered to the retail trade. Competition would be strong for new market initiatives from all levels.

As an efficient producer of livestock and meat products, it is the view of Agriculture Canada that CUSTA and NAFTA will be positive in terms of future growth and development of this sector. As with the North American agreements, the lowering of international trade barriers (GATT) should lead to greater security of market access for the Canadian red meat industry. The industry also looks forward to greater harmonization

10 Verbal communication with Burns Meats Ltd.
of product and packaging regulations with the U.S. and to reduced or eliminated border inspections. Both were agreed to under CUSTA. Increased access to, and stability of the market are expected to result in expansion of both production and processing.

The major domestic regulation that impacts negatively on this sector is restriction placed on provincially inspected plants only being allowed to market within the province. This problem is particularly troublesome for border towns where clients cross to shop, but it is illegal for the shop owner to deliver product to the customer across the line.

**Beef, Lamb and Exotic Meat Sector Analysis**

With the exception of the imbalance caused by the freight allowance on raw grains, the possible continuance of international trade barriers, and the normal competitiveness in the marketplace, there are no serious impediments to increased value-added processing within Manitoba. Opportunities are available for new companies to enter the market, although it should be made clear that they would face strong competition from companies currently serving this sector. The greater opportunity for development would seem to lie with companies already operating within the province. The best chance for significant growth and development will come from the use of advanced technology which will give a company an advantage on their competitors.

Should the decision be made to move to compensatory freight rates on grain, there will be considerable potential for growth in both animal production and red meat processing in Manitoba. Growth markets for processed products would be found in Ontario and the U.S.

Growth also could come from attracting a new major processor to the province, or from a joint venture with a U.S. company. The low cost of production in Manitoba, the potential to use currency swings to advantage, and the range of transportation options for moving product to major markets in Ontario and the mid-west U.S., should not be underestimated.

There appears to be an opportunity to expand the lamb industry in the province. With aggressive marketing and some attention paid to production uniformity, lamb production and processing could increase ten-fold over the next decade.

Similarly, there appears to be specific potential for continued expansion of wild game processing for marketing throughout the U.S., Europe and the Pacific Rim. There is a specific and unique opportunity for an exotic species processor to locate in Manitoba.

There also may be an opportunity for Manitoba to turn an impediment into an advantage. Although it is true that the large Alberta plants are hard to compete with in terms of the cost per animal slaughtered, smaller Manitoba slaughtering plants are in a better position to provide specialized customer service. The Manitoba red meat industry could offer a range of products designed to meet customer needs. The breed of animal, type of feed, animal rearing conditions, age at slaughter, processing procedures, ageing time and conditions and packaging all could be provided within pre-arranged customer specifications. Product quality and customer service can counterbalance a spread in price.

There is an excellent opportunity in this sector to encourage off-farm investment in the industry. Pure investors, processors, or even customers, can invest in animals and pay farmers on a contractual basis to rear them to market weight. With this approach, the farmers income is assured and his risk minimized. Likewise, the final price and profit margin for the investor, or end user, can be fixed months in advance. To protect against a downswing in price, the investment can be hedged on the commodity market. Where considered necessary, insurance against animal loss can be purchased, and hedging against Canadian/U.S. dollar exchange rate fluctuations can be practiced.
Dairy Sector

Industry Scope

Dairy farming in Canada in 1991 generated more than $3.4 billion in farm cash receipts. Shipments from processing plants that year were valued at $7.3 billion. Production of milk or milk equivalents in Manitoba decreased 44 percent between 1958 and 1992. During this time, the total farm value of milk has increased approximately 300 percent. These trends are similar to those in other provinces.

Canadian milk consumption in 1993 increased slightly over that of the previous year. Farm sales of milk and farm separated cream in Manitoba in 1992 were 277,316 kilolitres. This represents 3.95 percent of the Canadian total. The Manitoba farm cash receipts for dairy products in 1992 totalled $114.8 million.

Milk sold for fluid use represented 41.1 percent of the volume but contributed 53.5 percent of the dollar value in 1992. Cream and industrial milk made up the remaining share. Approximately 80 percent of the industrial milk in 1992 was used for making cheese. Production of cheddar cheese that year totalled 5,183 tonnes, down 4.6 percent from the previous year. The price of class 1 milk at the farm gate was $58.41 per hectolitre in 1992, down slightly from the previous year. The number of milk cows in the province in 1992 was estimated to be 55,000 head. The herd included an additional 23,000 dairy heifers.

The largest processor in the province is Beatrice Foods Inc. with nine fluid milk plants, one butter/milk powder plant, and one cheese plant. The next largest is Manco Foods Inc. with four integrated processing plants. These are followed by Lucerne Foods Ltd. with one fluid milk plant and one cheese plant, and Dufferin Employment Cooperative Ltd. with two integrated plants. In addition to these larger processors, there are about six small dairies and four small cheese plants scattered throughout the province. There also is a small goat herd and one fluid goat milk plant in the province.

Notable Industry Characteristics

The slight rise in consumption observed in 1993 over the previous year may indicate that the downward trend in consumption of dairy products has ended. While consumption of fluid milk and butter has declined in recent years, per capita consumption of yogurt and specialty cheeses has been on the increase. The total per capita consumption of fluid milk currently stands at about 100 litres per year. Decreases in consumption over the past 15 years are attributed to reported health hazards linked to excessive levels of animal fats in the diet.

Milk production is controlled in Canada under a national supply management plan. This plan, which was adopted in the early seventies, effectively limits production of fluid milk to intra-provincial demand across the country. Milk used in the production of processed dairy products also is controlled through production and supply quotas which have been set to meet traditional levels of usage by processors.11

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11 The supply management system in Canada involves a wide array of control mechanisms. The system is currently in a state of flux owing to the recently concluded Uruguay round of the GATT negotiations. A full explanation of the system is beyond the scope of this study. Readers interested in learning more about the system are encouraged to contact the Canadian Dairy Commission, or the Manitoba Milk Producers’ Marketing Board.
As a result of an extensive review\textsuperscript{12} of the dairy industry in Canada by the major stakeholders, several changes to the current structure are contemplated. Some of the recommended changes are on hold at the current time pending the ramifications of the GATT talks and the follow-up negotiations.

In each province, the selling price of milk at both the farm gate, and the retail level is controlled by a milk prices review board. The farm gate price is set on the basis of costs plus a fair profit margin. Prior to the introduction of the supply management system, milk prices and availability varied significantly throughout the year. The system has effectively eliminated these variances.

Under the current system, excess production, should it occur, is either purchased by the producer associations for sale off shore, or purchased by the Federal Government for use in foreign aid programs. There is concern in the U.S. that the Canadian system constitutes unfair trade practice. Cheese, yogurt and ice cream is allowed to enter Canada, but only under prescribed quotas.\textsuperscript{13}

Cattle breeders are continually searching for ways to reduce the fat content of milk while retaining protein levels. Unfortunately research to date has found only a positive correlation between fat and protein content. Changes brought about through conventional breeding are slow because the time between selection of genetically desirable parents to proven milk production of the offspring. This time span can be as much as 7 years.

During the past 10 years there has been considerable consolidation in the processing, wholesaling and retailing sectors in western Canada. Supply management supporters believe that without the legislated marketing control, individual dairy producers would be at the mercy of the large corporations.

The fluid milk and processing facilities located within the province are running at about two-thirds capacity. The large fluid milk processing plants are considered to be up to date regarding equipment and technology.

Every province in Canada would like to increase their share of the industrial milk quota, but under the terms of supply management agreement, this is not likely to happen. Because dairy product consumption also is down in the U.S., there is an oversupply of product and production capacity in that country. Without the protection of supply management, or high tariffs, there is a fear expressed by marketing board supporters that the U.S. would dump their surpluses into Canada and cause the price of milk to decline.

**Issues in the Dairy Sector**

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the dairy sector meeting and in follow-up discussions.

**Production Related Issues**

Manitoba’s dairy farmers do not see potential for significant growth in the near future. The combination of the reduced consumption of dairy products and the restrictions of the supply management system, leaves farmers thinking more about retaining existing production levels, rather than thinking about growth of their industry, or their individual operation.


\textsuperscript{13} It is anticipated that the recently adopted GATT agreement will change this from a quota system to a system of tariffs.
Access to information was not identified as a problem by Manitoba dairy producers. Technology also is not a constraint as dairy farmers are served well in the province. A 2 - 3 cent/litre research levy is charged on milk shipped from the farm. The University of Manitoba, and the marketing Board serve as sources of technology for producers.

Response to a question concerning producers’ economic competitiveness varied. It was apparent that costs varied depending upon the herd size, age of the equipment and management practices. It was agreed that the cost of feed is a major factor in Manitoba’s favour. The relatively small individual herd size and the distances to processing plants were identified as contributing to elevated productions costs.

Differences in regulations governing the use of biological stimulants in Canada versus the U.S. were identified as a possible regulatory impediment. Differences in provincial regulations and testing procedures for bacterial content, antibiotics, and added water represent potential barriers to interprovincial trade.

The safe and effective disposal of manure is an ongoing environmental challenge for producers.

Processing Related Issues

Technological constraints facing dairy processors center on the safe and effective production of processed dairy products. Small companies and individuals entering this business face an array of technical challenges. Assistance is available from the University of Manitoba and from Agriculture Canada. The large companies operating plants in the province have sufficient in-house capabilities to meet these technical needs.

Economic constraints to value-added processing relate to the dairy industry being highly competitive, with several companies vying for a shrinking market. This, coupled with significant capital costs involved in setting up a dairy operation, would prove challenging to a start-up operation. In addition, a new operator would be faced with buying milk quota from an existing processor unless the product to be produced is entirely new and would not displace any existing dairy products, in which case quota may be granted by the Board.

Because both the raw milk and retail price are fixed by the Milk Prices Review Board, processors claim they have little or no room to look at new opportunities. Restricted access to additional quota also impedes companies from doing additional processing. Rural processors are at a price disadvantage as they must pay a pooled price for the raw milk plus the added freight to ship their finished product to Winnipeg markets. When comparing costs of production in Canada to those in the U.S., one processor ranked our deficiencies as follows: 1) price of raw milk; 2) distribution; 3) packaging; 4) wages.

Whey disposal is an unresolved environmental issue in most of the cheese plants. Technology is available to deal with the problem, but the low volumes in several of the plants place economic limitations on recovery options.

Packaging is a significant constraint to this sector. However, milk cartons and plastic tabs are not produced in the Province. The added freight to ship these materials in from as far away as Vancouver is substantial.

Regulatory constraints can negatively impact dairy processors. Under the current supply management system, processors are restricted in the quantity of milk they receive from the Milk Marketing Board. Thus even if processors are successful in capturing out of province markets, it would not necessarily increase their volume of business. The industry is looking at ways of reducing this impediment. Variable standards governing processing plant construction represent another potential barrier to trade.
Entrepreneurs seeking entry into the processing business face the problem of obtaining a supply of milk. Under the current system, limited quantities of milk would be made available for experimentation and market evaluation, but unless the product is truly unique and does not replace any existing dairy products, it is unlikely any significant milk supplies would be made available for future production.

**Marketing Related Issues**

The cost of transporting relatively small quantities of milk from farms to distant processing plants represents a significant market constraint. Owing to the relatively high weight to value ratio of fluid milk, the economical shipping radius is limited. This limitation is not as restricting on higher valued products such as specialty cheeses and yogurt.

**Market demand** for new product entries is problematic. It is doubtful that a new processor would find a receptive market for conventional dairy products. Existing processors would react to any significant competition. A rural value-added processor might have some limited success in a local market.

Challenges in gaining **market access** to retail store shelf space would be substantial. Greater potential lies in initially focusing on the restaurant and institutional business. This may be the only market entry for rural cottage industry.

**Primary competition** in the Manitoba market is dominated by three major corporations. Competition would also come from the small cheese and milk plants scattered throughout the province. With the pending demise of the quota on Canadian imports of dairy products, the trade agreements (CUSMA/NAFTA) will become important. The specific impact will depend upon the outcome of current negotiations among the three nations. The key issues are the initial tariff rates that will replace the quota system, the rate at which tariff levels will be phased out, and differences in labelling legislation. The outcome of the GATT agreement also will have a major effect on the way the dairy industry is structured in Canada. The structure of a replacement marketing system currently is being debated.

**Dairy Sector Analysis**

The reduced consumption of dairy products, coupled with continuing controversy over the tight control which current legislation places on the industry, have made it clear to many involved in the sector that there is need for change. In light of the recently signed GATT agreement, it appears the direction of the industry will be decided, to some degree, by our international trading partners. Until new tariff structures are known, it is difficult to comment on the future direction of the industry.

True cost of production and processing figures are difficult to obtain for different jurisdictions. Players in the industry have various motives to inflate or deflate the numbers for their own benefit. The fact that feed prices are very competitive in Manitoba, and that feed constitutes the highest single cost in the production of milk, suggests that Manitoba dairy farmers have potential to compete in the North American marketplace. This position was shared by many of those attending the sector and regional meetings.

It is clear that the opportunities for new processors to establish viable new businesses are limited under the current supply management system. With the vast majority of the dairy processing industry in the province being controlled by out of province corporations, it is unlikely that Manitoba will play a lead role in developing or manufacturing novel products.
VEGETABLES

Industry Scope

In 1992, 4,565 acres were planted to commercial vegetables other than potatoes. Owing to weather and disease problems that particular year, only 81.6 percent of this area was harvested. The total dollar value of these crops was about $11.7 million. Potatoes were grown on about 49,000 acres with a farm gate value of $51.9 million. About 80 percent of potato production was destined for processing, with the remainder going to the table and seed markets.

It is difficult to estimate the number of vegetable farms in the province because operations range in size from a few rows to hundreds of acres. The number of commercial growers could be as high as 200, if you count all operations of more than 4 acres. There are about 10 farms that are devoted almost exclusively to vegetable production and as many as 100 farms that derive significant income from vegetable production. There are about 200 additional potato growers in the province.

Two multinational companies produce frozen french fries in the province, and one company produces potato chips. Two smaller companies produce semi-processed and processed potato products for the retail market. These latter two companies process small quantities of other vegetables as well.

Depending upon annual yields, between 70 and 90 percent of the table potatoes and other vegetables are consumed within Manitoba. The remainder is marketed in neighbouring provinces, with a small amount going to the U.S. More than 90 percent of the french fry production is marketed outside of the province. Much of this is destined for other locations across Canada, but some is shipped into the U.S. and Pacific Rim countries.

Notable Industry Characteristics

All root crop vegetables fall under the jurisdiction of the Manitoba Vegetable Producers’ Marketing Board (MVPMB). Under the terms of the Manitoba Vegetable Producers’ Marketing Plan Regulations, any production in excess of 4 acres automatically becomes the "property" of the Board in a marketing sense. To accommodate processors, the MVPMB will authorize production on a case-by-case basis for delivery directly to a processing plant. A condition of this authorized exception to the Act is that a pre-plant production contract is signed with the processor. Leafy, stock, and flowering vegetables, however, can be grown and marketed without MVPMB involvement.

Marketing of root crop vegetables to the table market is controlled through a producer quota system. Most vegetables destined for the table market are cleaned and packaged on farm and shipped directly to the distributor, or to the MVPMB warehouse in Winnipeg. In addition to negotiating sales on behalf of members, the MVPMB provides a wide range of member services. These include research coordination, information dissemination, and bulk purchasing.

Farmers growing potatoes for the two frozen french fry processors have come together voluntarily to form an organization called the Keystone Vegetable Producers’ Association. KVPA serves as a coordinating body for a number of functions, including contract negotiations, setting research priorities, and coordinating information dissemination. KVPA has been authorized by the MVPMB to act on their behalf in assuring the terms of the Marketing Act, and the Boards rulings are followed. A similar organization performs these functions for the chipping potato growers.
In past years there were production requirements for the vegetable canning in Morden and the Campbell Soup plant in Portage la Prairie, but both plants have ceased operation. Although canning is the most widely used process in the vegetable industry in Canada, it is unlikely that a new canning facility would be viable in Manitoba owing to the cost of transporting empty cans from distant manufacturing plants.

There have been efforts over the years to produce vegetables in greenhouses, but none have been commercially successful. Some success has occurred in producing vegetable seedlings for transplant into fields in the spring. Some market gardeners in the Winnipeg area have begun u-pick operations. The degree of success of this approach is yet to be determined.

The large vegetable and potato growers in the province have state-of-the-art equipment and are technologically up to date. Annual visits are made to other production locations to obtain first hand knowledge.

Potato production has shifted dramatically over the past 30 years. Table stock production has fallen slightly, while process potato production has increased from 1.2 million cwt in 1958 to more than 8 million cwt in 1992. A recently completed study indicates that the potato industry in Manitoba is competitive, at the farm gate, with other growing locations in North America.

Several vegetables, including carrots, brocoli, cauliflower, and rutabaga have had significant increases in per capita consumption over the past 10 years. Combined with improved storage capability, increased demand has resulted in increased volumes for these crops.

In retail sales there has been a swing away from canned and frozen vegetables toward fresh product. Although this has opened some new long-term opportunities in Canada, the trend could favour southern U.S. and Mexican production where fresh product is available almost year round.

Vegetable storage in Manitoba ranges from a few weeks for crops such as lettuce and celery to a full year for potatoes. To some degree it is the inherent inability to supply vegetables year round that inhibits both domestic and export market development. Similarly, food processors are reluctant to set up operations in Manitoba where the number of operating days in a year are less than that enjoyed by their competitors in the southern U.S.

Manitoba vegetables are recognized as being of top quality. The superior quality of Manitoba’s potatoes used for french fries is well known within the industry. An increasing amount of potato production is occurring under irrigation, but there is still significant dry land production. Because of the variability in potato yield and quality from year-to-year, there is often a sizable quantity of excess product with limited markets. Other vegetables are produced almost exclusively under irrigation.

**Issues in the Vegetable Sector**

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the vegetable sector meeting and in follow-up discussions.

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Production Related Issues

Some producers express a positive attitude toward potential growth in the vegetable industry. This results from continuing increases in per capita consumption, and increased sales that will result from the extension of storage times by new technology. There also is a belief that commercial production of some of the so-called "exotic" vegetables could occur within the province. However, there are differences of opinion and attitude regarding the potential for expanded exports of raw or processed vegetables. Some believe there is no way we could compete on a sustained basis with Californian and Mexican production. Others believe that with aggressive marketing we could become a significant supplier to the Canadian and northern U.S. markets.

Manitoba Agriculture staff and the growers themselves have done a good job of distributing production information within the industry. However, given the complexity of vegetable production, there will be an ongoing need to answer growers' questions.

Although good progress has been made in extending the effective time of storage for locally grown vegetables, production and storage technology should be improved if the industry is to overcome the constraint caused by the short safe storage period for certain crops.

There also is an ongoing need for production research to increase yield, and to reduce product deterioration from insects and disease. Producers have been doing more research on their own as a result of cuts in government funding for vegetable research. Industry participants believe that the industry will soon be constrained in its growth unless more public research is done.

The ability of producers to compete varies within the industry. There is clear evidence that Manitoba potato growers are able to compete with the best in North America. It also is evident that producers of most other vegetables are competitive "in-season". However, the loss of Manitoba's competitive position occurs when off-season storage costs mount while southern producers are still marketing fresh produce directly from the fields.

Vegetable growers face challenges each year in finding labourers willing to do the manual work in the fields. Larger growers have been relatively successful at attracting Mexican workers for these jobs.

From the regulation aspect, producers would like to see a shorter turn-around time on the licensing of agricultural chemicals. They believe the Canadian and U.S. authorities should live up to the terms of the CUSTA and get on with harmonizing regulations. A second regulatory problem relates to definitions as to what constitutes "organically grown" produce.

Producers view the new wave of environmental regulation as a constraint to further development of the vegetable industry. Much of the concern revolves around water retention, water diversion, and irrigation issues.

Processing Related Issues

The major processors each have the resources and contacts to resolve technological difficulties. However, entrepreneurs seeking to enter the vegetable processing business may experience difficulties in dealing with technological issues. Fortunately there are people and testing facilities within the province which could be used to overcome most of these challenges.

Processors were asked to identify economic constraints to value-added activity in the vegetable sector. Although building requirements are not as stringent as those for meat processing plants, there are significant costs involved in setting up a vegetable processing operation that produces ready to serve food items.
Equipment is expensive, as all must meet federal sanitation standards. Also, little vegetable processing equipment is manufactured in Canada. Entrepreneurs seeking to enter the business must be aware of the economic ramifications of operating a plant for less than 11 months a year.

Dealing with vegetable wastes is becoming a significant environmental issue to processors. The waste disposal fees and logistical constraints being placed on food processing plants are issues which must be addressed as part of an overall business assessment.

Packaging is a problem only in that the effective storage of packaged vegetables can be difficult. The technology is available within the province to address most of the serious issues.

Other than the constraints which the regulated marketing system has on the processing industry, no significant regulatory constraints were identified by vegetable processors.

One participant mentioned that there are currently no regulations governing quality of vegetables destined for processing. Where some view this as a problem, others see it as an advantage. For their part, the major processors set the standards and quality attributes which are important to them. As long as the quality assessment is done, and seen to be done, in a fair way, this approach may be far superior to a government controlled approach.

Marketing Related Issues

Certain vegetables do not stand up to transportation and handling abuse. It is, therefore, essential to use proper packaging materials to protect the produce against bruising. Constraints would be encountered in processing fresh prepared vegetables in most rural locations in Manitoba. This business involves direct marketing to restaurants and, therefore, favours processing close to major centres.

Because the fresh processed vegetable market demand is still relatively new, and the market is still expanding, a window of opportunity exists for new companies entering the market. New product introductions must relate to nutritional value as well as the ease of preparation of processed vegetables.

Although logistical and pricing obstacles would act as impediments to a rural cottage industry, a well designed marketing strategy should overcome most of the difficulties and allow market access.

Traditionally, the competition has come from California companies. Other sources include companies located in British Columbia, Alberta, various southern States, and Mexico.

Some believe that the reduction of duties on U.S. product entering Canada, and the opening of the Canadian market to Mexico will result in lower prices for local producers. The opposite opinion also was expressed. Some believe that the lower duties and the current low value of the Canadian dollar will result in higher returns for product shipped into the U.S. The net effect of CUSTA/NAFTA on this sector is yet to be determined.

It generally was agreed that changes in the GATT agreement would have little effect on trade between Canada and the U.S. However, should the outcome of these discussions lead to the dismantling of supply management within Canada, there could be some changes in inter-provincial trade. Manitoba is expected to compete well if inter-provincial trade barriers are reduced or eliminated.

Marketing difficulties can be encountered in shipping product into the U.S. Product can be held up at the border for testing. This can result in missing client delivery schedules as well as the possibility of the shipment
being rejected. The requirement for inspection on loading of a truck, coupled with inspection which could occur at the U.S. border is seen by Manitoba shippers as an unnecessary expense and delay.

Quality variability from one season to the next, and even from one field to the next can cause market problems. Because of this it is essential for producers and processors to work in harmony to minimize the impact of quality variation.

**Vegetable Sector Analysis**

Vegetable production is both capital and labour intensive. In addition, the combination of limited frost free days, variability in yield and quality, limited time of safe storage after harvest, and the effort required to market seasonal products into the grocery or restaurant industries, cause many farmers to think carefully before entering this sector. The above notwithstanding, there are opportunities to grow and process a wide range of vegetables in Manitoba. Even crops which traditionally have required a longer growing season have potential to be produced locally through the use of modern plant breeding and production technologies.

Value-added processing of vegetables is difficult because of the perishability of the raw product as well as the variability in quality from year-to-year and field-to-field. The effect that one or two "bad years" might have on a value-added business must be understood by anyone entering this type of business.

The combination of increased consumption of vegetables (both in terms of volume and variety) and the ongoing advances in production, storage and processing technologies, signals new value-added processing opportunities. Many of the opportunities fit the "niche market" categories. Often processing would be limited to a few weeks or months each year. This type of business may be best suited to people able to return to other interests for the remainder of the year. Corporations often have difficulty operating successfully in seasonal businesses. Although the consumption of frozen foods has decreased slightly in recent years, this process may still play a lead role in value-added processing in the vegetable industry in Manitoba.

Given the degree of competitiveness within the potato industry, and the volume of production, it is reasonable to believe there will be several peripheral business opportunities. The fact that there are two major potato processors in rural Manitoba greatly reduces the risk of reliance on the continuing operation of a single plant. The success of the potato industry suggests that other root crops may hold potential for development.

It is apparent that ongoing applied research will be required if the vegetable industry is to continue to expand. Some research could occur on farms, but there was a strong desire expressed by the industry to see research continued at both the University of Manitoba and the Morden Research Station. There is optimism that the new Crop Diversification Centre in Carberry will assist in identifying new opportunities in the vegetable sector.
FRUITS

Industry Scope

Commercial fruit production in Manitoba is confined primarily to four crops: strawberries, raspberries, saskatoons, and apples. A small quantity of pears and plums also are grown.

Strawberries

In 1992, 755 acres of strawberries were planted, of which 525 were bearing fruit. Yields ranged from about 3,000 to 12,000 lbs/ac. The total yield of about 2.4 million lbs carried a value of approximately $3.0 million. About 100 of the 129 members of the Manitoba Fruit Growers Association operate U-pick strawberry operations. There are several small family run companies producing gourmet quality jams.

Raspberries

In 1992, 170 acres were planted to raspberries, of which about 150 were in fruit production. About 40 acres of raspberries were used to produce jams and juice with the remainder sold through U-pick operations. The average marketable yield was about 2,500 lbs/ac. Mechanical harvesting was tested on about 12 percent of the crop.

Prices ranged from $1.00 - $1.25/lb. for berries destined for processing, to $1.50 - $2.25/lb. for pre-picked berries for table use. The total value of the crop was estimated to be about $0.5 million. In addition to limited niche market jam production, one company in the province produces a gourmet quality raspberry juice. Sales to date are mainly within province.

Saskatoons

Land devoted to saskatoon production rose to 110 acres in 1992, with about 50 acres in fruit production. Acreage has increased steadily over the past 5 years. Yields are about 2,400 lbs/ac, but vary depending upon the age of the plants and weather. Selling prices ranged from about $2.00/lb for U-pick to $3.00/lb for custom picked. About 15-20 percent was harvested in 1992 as U-pick. The total value of the crop was estimated to be about $0.3 million.

Apples

In 1992 apples were grown on about 90 acres in the province. About 55 acres had matured to the fruit bearing stage. An estimated 35 acres was used for commercial production - mostly for juice. Yields ranged from about 1,000 to 4,000 lbs/ac. Prices ranged from $0.30 to $0.50/lb. resulting in a total value of about $45,000.

Notable Industry Characteristics

The organoleptic qualities of fruits grown in Manitoba are considered to be among the best in North America. However, because the relatively short growing season, yields are considerably lower than those found in the major commercial growing regions of the continent.
The limited volume of production, coupled with the diversity of crops, makes it difficult for the Manitoba fruit industry to find significant research funds from within their own operations. Local industry appreciates the limited experimentation which has been conducted at the Morden Research Station and the University of Manitoba. This work is having some positive effects.

Strawberries

Strawberry yields currently are in the 5,000 lbs/ac/yr range in Manitoba. This compares to about 50-60,000 lbs/ac/yr in the southern U.S. None of the strawberry varieties grown in the province have been bred specifically for Manitoba conditions. The industry would like to see a breeding program, but recognizes that the costs would be hard to justify based on the volume of production. None of the current varieties of strawberries are winter hardy, nor are they machine harvestable.

The cultivars grown have been selected for yield and eating quality. These varieties can be stored about 7 days before mould spoilage begins. This compares to a 14 day shelf life for the California product. It has been estimated that less than 1 percent of the Manitoba strawberry market is supplied from local product. Attempts have been made to extend the effective growing season for strawberries, but with only limited success to date. Weather variability is a major factor in annual yield fluctuations.

Raspberries

One variety of raspberry (Boyne) has shown fair tolerance to winter conditions and is at least partially machine harvestable. As raspberries are more readily grown in home gardens, the demand for U-pick is less than it is for strawberries. Because raspberries are indigenous to Manitoba, the yield differential with other growing regions is less than it is for strawberries.

The 1 to 2 day shelf life for locally grown raspberries limits sale of current varieties through chain stores. Again, California product exhibits a much longer shelf life. Mechanical harvesting is an option for berries to be used for processing, but owing to the degree of damage to the berry, this method of harvesting cannot be used for product destined for the retail market.

Saskatoons

Because saskatoons are native to Prairie Canada, winter hardiness is not a problem. The limiting factors are variable yield and susceptibility to disease. In the last few years there have been serious attempts at producing commercial quantities of saskatoons within the province. The plant has shown susceptibility to fungal disease in locations where there are dense stands. There are currently no registered fungicides for use on saskatoons.

Mechanical harvesting of saskatoons is a possibility, but degree of success is yet to be determined. Collaborative research on saskatoon production is currently in progress at the three prairie research stations of Agriculture Canada.

Apples

A significant amount of apple cultivar selection and breeding has occurred at the Morden research station over the past 40 years. This has resulted in the selection of more than a dozen varieties of apples which can be grown successfully in Manitoba. However, there has been only limited interest in commercial production of apples because of the low yields compared to those in prime growing regions. Most apple trees planted
in the province are for personal use. During the past 10 years several farmers have planted small orchards to test the commercial viability of the crop.

Issues in the Fruit Sector

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the fruit sector meeting and/or in follow-up discussions.

Production Related Issues

Manitoba’s fruit growers expressed a variety of attitudes toward potential for significant expansion in the sector. There is a level of pessimism that the strawberry industry will not grow much past the current level without major advances in production technology. There is cautious optimism in the cases of raspberries and saskatoons, and there is a "wait and see" attitude toward apples.

Generally, growers have been able to obtain information from government and university sources, but much of the information comes from other growing regions. New growers are faced with a significant educational hurdle during their first few years in the business.

Some technological constraints are faced by fruit growers. There is an immediate need for research on certain aspects of fruit production. Winter hardiness in strawberries and disease control in saskatoons are two examples. There also is an obvious need for an active breeding program if there are to be significant advances made in this sector.

Several economic constraints hamper competitive productions. Until a winter hardy and/or a machine harvestable variety of strawberry is found, it will be virtually impossible to be competitive with U.S. growers in producing berries for processing. Harvesting strawberries for commercial sale is a problem owing to a shortage of labourers prepared to do the picking at low wages. The current labour rate for picking is about $0.30/lb.

It is not yet known whether raspberry production will be competitive. An 8 acre field designed for mechanical harvesting will begin fruiting next year. Results of this venture could dictate the future direction of the raspberry industry in the province.

There was consensus that Manitoba could compete with other growing locations in saskatoon berry production. The key issue is whether markets can be generated for this berry at the prices needed to sustain the industry.

Only one regulatory constraint to development of the industry was identified. The time and expense required to licence new chemicals for insect and disease control is seen as a real impediment by fruit growers.

No major environmental issues were raised by producers in the sector.

Processing Related Issues

Technological constraints facing fruit processors were difficult to define. Because there has been little processing done in the past, there is not a wealth of local experience upon which to draw. Entrepreneurs entering this business would be wise to seek information from a range of sources, many of which would be located outside the province.
The primary economic constraint would be the price and availability of raw product. "Standard" type products, such as jams and jellies face stiff competition from the major processors in this business. Production areas such as eastern Europe, where growing conditions are ideal and labour is inexpensive, represent very strong competition.

No significant environmental issues were identified by fruit processors.

Packaging may create a problem in this industry. The relatively high cost of glass containers virtually rules out production of all but high valued gourmet products. Some potential exists, however, in producing novel products that can be packaged in flexible or semi-rigid plastic containers.

When processors were asked to identify regulatory constraints, some concern was expressed regarding the different application of provincial food processing regulations. Food processing plants are required to comply with the regulations, but home businesses selling through farmers' markets are not required to comply.

Marketing Related Issues

Raspberry growers face real problems in transporting their product to market because of the delicate nature of the product, and the limited shelf life of the current commercial variety. Strawberry and saskatoon growers face logistic problems as well primarily owing to the low volumes being handled. Apple growers face fewer logistical problems because of the larger volume of product and the longer shelf life.

There is not a great deal of market demand from chain stores to handle locally grown fruits. However, specialty stores and restaurants often seek local produce as a feature product. There is some demand for processed products using pure fruit. However, price becomes a factor in many cases. Synthetic fruit flavours can be produced at low cost relative to natural flavours, and most consumers are unable to tell the difference. The greatest market demand is in the gourmet, or, niche market areas.

Cottage industry in rural Manitoba would have limited market access. Large chain stores and wholesalers do not want to deal with intermittent local suppliers, particularly when dealing with a highly perishable product. Access to specialty markets is not as difficult, but the effort required relative to the volume of sales must be carefully assessed.

This sector faces strong competition from the southern U.S., Ontario and British Columbia. There also is significant competition from foreign countries which supply everything from fruit concentrates to end products. In the case of U-pick, competition comes from other local growers.

The general feeling of producers and processors is that CUSTA and NAFTA will have little or no effect on the industry. A GATT agreement also would have little or no effect upon this sector.

Similarly, no domestic regulations relating to marketing were identified as having a negative impact on the sector.

One additional impediment was discussed. In the case of saskatoons, there is a 6-7 year period from the time of planting to the time when the bushes will bear significant quantities of fruit. This time lag, coupled with the degree of uncertainty of future markets and competition, add a level of risk to initiating production in this sector.
Fruit Sector Analysis

The fruit sector has enjoyed a fairly high level of interest over the past few years, primarily owing to the success of the U-pick operations. As the U-pick opportunities become limited, attention has turned to the potential to capture niche markets for processed product, in the retail or Hotel, Restaurant and Institutional Trade sectors.

Future expansion in the sector will depend upon how many more people will practice U-pick, and how innovative entrepreneurs are in finding niche markets. Growth in the saskatoon business will depend upon how successful marketers are in developing a high quality image of the product in the U.S. market.

The future of the sector also rests to a considerable degree upon the level of commitment which the private sector and governments show in their respective support of production research. In spite of the optimism, and the potential to increase yields and disease resistance, it is generally understood that Manitoba’s harsh winters will limit the ultimate expansion in the fruit sector.
CEREAL GRAINS

Industry Scope

Cereal production in Manitoba in 1992 is presented in five categories (Table 5). Based on all measures, wheat is by far the most significant crop, barley and oats are important, and all other grains are minor. In 1992, Manitoba accounted for 19.4, 19.7 and 14.4 percent respectively of the wheat, oats, and barley produced in Canada. Cereal grains contributed about 56 percent of the farm value of crops produced.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Hectares (000s)</th>
<th>Production (000s tonnes)</th>
<th>Total farm value ($000s)</th>
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<td>Oats</td>
<td>194.2</td>
<td>555.2</td>
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<td>Barley</td>
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<td>Rye</td>
<td>28.3</td>
<td>62.2</td>
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<tr>
<td>Mixed Grains</td>
<td>8.1</td>
<td>25.5</td>
<td>1,810</td>
</tr>
</tbody>
</table>

Source: Manitoba Agriculture Yearbook, 1992

Preliminary information for 1993 indicates that wheat production was only 63 percent of that produced in 1992. This was based on a 5 percent reduction in acreage and a 33 percent reduction in yield. Oats and barley acreage were up 4 and 5 percent respectively, over the previous year, but because of lower yields, production levels were down 11 and 21 percent respectively. Rye acreage was down 13 percent and production down 35 percent. Because of higher grain prices in 1993, and increased CWB payments, farm cash receipts for cereals were up from 1992 levels.

The vast majority of the wheat grown in Manitoba is spring bread wheat. Small but significant quantities of durum wheat also are produced. Very small quantities of winter wheat are grown in the south-west corner of the province. Of the approximately 1.5 m tonnes of barley produced in Manitoba, about 10 - 15 percent is selected as malting grade.

Since 1958, wheat acreage and yield have approximately doubled, while the total farm value has increased from $83 million to about $580 million. During this same time period, oat acreage harvested for grain has decreased from about 600,000 ha to less than 200,000 ha. Oat yields have doubled over the past 35 years and currently stand at about 2,500 kg/ha. The value of the oat crop has fluctuated over the past few years from a low of $18.6 million in 1991 to a high of $52.7 million in 1992.

Barley production has ranged from a low of 201,000 ha in 1964 to a high of 951,000 ha in 1981. Yields have more than doubled since 1958 and currently stand at about 3,000 kg/ha.

Rye acreage has varied from a low of 26,300 ha in 1987 to a high of 92,800 ha in 1982. Yields of rye have doubled since 1958 and currently stand at about 2,000 kg/ha. The value of the rye crop has varied from a low of $1.0 million in 1961 to a high of $26 million in 1981.
At one time there were 33 flour mills in the province. Today there are two mills producing limited quantities of wheat flour and one producing oat products. In addition, there are two or three local mills producing very small amounts of stone ground product. Some value-added processing is done in the form of baked goods, but other than simple flour milling, there is no intermediate processing or fractionation occurring.

**Notable Industry Characteristics**

There has been a focus on export markets since the beginning of the western Canadian grain industry. During the early part of this century, this included both raw grains and milled product. Over time, the market for milled product has dwindled as foreign countries found it more efficient to import raw product and do the milling themselves.

In order to remain competitive in foreign markets with the U.S., Australia and other major grain exporters, the Crow rail subsidy on raw grain shipments was introduced. This meant that it was not only less expensive for the west to ship grain to export markets, but also to ship grain, rather than flour, to eastern Canadian markets. This method of supporting the industry effectively stifled value-added processing of grains on the prairies. Although the Crow rate now applies to the transport of flour, it does not apply to further processed foods, and therefore, the negative effect of this subsidy on value-added processing still persists today.

The evolution of strong farm organizations, the pool elevator companies and the Canadian Wheat Board (CWB), all focused upon export markets for raw grains, led to a regulatory system which supported farmers and exporters. The system is geared to provide maximum returns to the farmer, but affords little support for the processor. By regulation, all wheat and barley must be sold through the Wheat board.\(^{15}\) The system does not control the production of these grains, but marketing is based on producer quotas. Grain companies play an active role in export marketing and shipping of food grains, but only as agents of the Wheat Board. Grain processors must purchase their wheat and barley supplies from the Board. The CWB also controls the movement of grain through their exclusive authority to allocate rail cars.

Canada's focus in wheat breeding has been on bread making quality. Although it is recognized that our high quality wheats are among the best in the world, the current world market is looking for different quality, lower priced varieties.

In recent years, some of the soft white spring wheat has been purchased by Mohawk Oil Ltd. for the production of fuel alcohol at their facility in Minnedosa. They also have experimented with some off-grade wheats.

For over a century, Winnipeg has served as the grain industry capital for Canada. In addition to being home base for most of the grain companies and the Canadian Wheat Board, most of the grain research has occurred in this city. Facilities include the Grain Research Laboratory, the Canadian International Grains Institute, Agriculture Canada's Cereal Research Station and, the Brewing and Malting Institute. Significant research is conducted at the University of Manitoba. Winnipeg is also home to the Canadian Grain Commission, the Branch of Agriculture Canada empowered to enforce the various acts and regulations governing the industry.

The Uruguay round of GATT negotiations, which have just concluded, are expected to set the industry in a new direction. At present, all major grain exporting nations are subsidizing exports in efforts to meet competition from other nations. The U.S. export enhancement program, which covers both raw and processed cereal products, has all but eliminated Canada's small flour exporting business. Canadian processors have

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15 Oat marketing was removed from Wheat Board control in 1988.
warned that if changes are not made soon, even greater damage will occur to Canada’s processing industry. Currently 80 percent of the milling capacity in Canada is controlled by foreign ownership.

In spite of the fact that flour mills across Canada have been shut down and dismantled as export markets have been lost, the remaining mills are operating at only 72 percent of capacity. The one significant wheat processing facility, located at Thunder Bay, recently has been closed by the U.S. owners. The starch and gluten markets in western Canada will be served from the company’s new facility located in North Dakota.

Significant value is added to barley within the province. Through the malting and brewing process, 1.17 cents worth of barley can be converted into a $2+ bottle of beer.

Manitoba’s only oat mill, built three years ago, produces a variety of specialty oat flours and bran. A condition of establishing this processing facility was that oats be de-classified as a "board" grain.

Issues in the Cereal Grains Sector

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the grains sector meeting and in follow-up discussions.

Production Related Issues

The increasing difficulties in finding sufficiently attractive markets has left the producers with a negative attitude about the future. Although some believe there is potential to establish a significant value-added processing industry in Manitoba, many in the industry do not see very much potential for development. Some argue that the export mentality, which dominates the industry, has prevented the development of a local processing industry. However, with the recent signing of the GATT agreement to lower trade barriers, there is renewed optimism on the part of farmers that grain prices will rise and that new markets will be found.

Few needs were expressed for more complete and timely information relating to grain production. Farmers have had full access to information on cereal production. Knowledge also is passed down from generation to generation.

Similarly, owing to Manitoba’s long standing focus on cereal research, farmers are not lacking for production, handling, and storage technology.

Economic constraints in cereal production were not evident, and it is generally believed that Manitoba farmers can produce cereals at, or below, costs incurred elsewhere in North America.

The only regulatory constraints to the development of the industry involve the need for new grain varieties to be visually distinguishable. This problem has limited varietal development to some degree.

Disposal of cereal straw is an ongoing environmental problem for the producer. The combination of restricted markets for straw and high costs of field work, result in some farmers concluding that they are better off burning the straw than working it back into the land, or baling it for future sale. Stubble burning remains an environmental issue, especially on the heavier soils near Winnipeg.

Processing Related Issues

One major technological constraint faces grain processors. In spite of the fact that Manitoba is a world leader in cereal research, much of the focus has been on attributes relating to traditional bread making.
Entrepreneurs seeking information on other areas of cereal processing technology would enjoy some support from the local scientific community, but may require additional out-of-province assistance in some of the applied technology areas.

The major economic constraint to value-added processing was identified as the cost of raw grain. Canadian millers claim that wheat prices are higher here than they are in the U.S. Millers believe the lack of concern for the milling industry has reduced it to one of supplying only local or regional needs.

No significant environmental issues were raised by processors.

Packaging is not a problem per se, but because of the difference in enforcement of packaging regulation (specifically the requirement for bi-lingual labels) for domestic and imported product, local processors feel disadvantaged.

Among regulatory constraints which negatively impact upon grain processors, restricting the importation of wheat effectively leaves the CWB in a monopolistic position. Processors feel their destiny is not sufficiently within their control with this system. Also, the high taxes applied to beer serve as a significant impediment to the development of the malting barley industry.

Marketing Related Issues

The rail transportation system has been designed primarily to move raw grains destined for export markets. However, the current system constrains domestic processors in obtaining specialized raw products (e.g. high protein wheat). Because the movement of processed cereal products to market occurs primarily by truck, significant transportation impediments do not exist at this level. Rural processors should not incur specific logistical problems in shipping their product to market.

There are a wide range of products which could be produced from cereals. Small processors would face variable market demand depending upon the novelty, quality, and price of the product offered for sale.

Similarly, access to markets will depend upon the nature of the product being offered. It is important to understand the inherent strengths and weaknesses of your product compared to others on the market. Cottage industries in rural Manitoba should be aware of access difficulties.

Small rural processors would encounter stiff competition from large corporations in certain segments of the industry. Standard flour products, breakfast cereals, snack foods, and beer would be particularly difficult to market owing to the dominance of these industries by the multinationals. The new oat mill in Portage la Prairie, and the barley malting facility in Transcona, would provide strong competition in their respective product lines. Small processors should look for niche opportunities where they can take advantage of unique products developed to meet specific client needs. An opportunity exists for the start-up of one or two mini breweries, focused on local tastes.

Although trade with the U.S. has improved under the CUSTA, the U.S. threat to reinstate duties on durum wheat under the terms of article 22 has a negative impact on the industry. There is a general belief by those interviewed that Manitoba ultimately will gain significant market share, both in the U.S. and Mexico, if all subsidies and duties were removed (NAFTA).

If an international agreement (GATT) was enacted that truly eliminated subsidies and tariffs, Manitoba should benefit. At the present time, the Government of Canada has been prepared to meet subsidized competition for raw grains, but not for flour or further processed products.
Two domestic regulations impact negatively on marketing in the sector. First, differences in provincial licensing of vehicles dictates that only common carriers can be used for interprovincial trade. Second, provincial licensing of beer production and sales limits inter-provincial trade.

Cereal Sector Analysis

Although the grain industry has been through some difficult years, Winnipeg remains the "grain capital" of Canada. The concentration of grain industry executives and researchers is the envy of other cities. This represents an asset upon which the province can build.

Manitoba’s cereal processing industry clearly has lost ground over the years. If cereal processing becomes a priority for the province, significant changes in attitudes, and in the regulatory and marketing systems, will be required. There is little incentive for entrepreneurs to develop new varieties of wheat or barley only to have their marketing controlled by the CWB.

The industry is dominated by forces focused almost exclusively on the export of raw grains. There is a general lack of understanding and appreciation for the wide range of processed products that can be produced from cereals. The replacement of imported cereal products alone represents a major new value-added opportunity.

Malt producers and oat processors appear to be able to compete in export markets. If this is the case, the province also should be able to compete in a wide range of further processed cereal products, including breakfast cereals and snack foods.
OILSEEDS

Industry Scope

Canola is the principal oilseed grown in Manitoba. A total of 728,400 ha were harvested in 1993, up 16 percent from the previous year. The yield of 1.21 t/ha and overall production of 884,500 tonnes were down 23 percent and 10 percent respectively from the 1992 levels.\(^{16}\)

Flaxseed is the second most important oilseed crop to the province. A total of 218,500 ha were harvested in 1993, up 64 percent from 1992. The yield of 1.12 t/ha was 72 percent of that of the previous year. The total production of 243,900 tonnes was 17 percent higher than the previous year. Manitoba farmers also produce significant quantities of sunflower for both oil production and as a seed condiment. A total of 44,500 ha were harvested in 1993, up 5 percent from 1992. Yield of 1.06 t/ha was 18 percent lower than the previous year. Small quantities of safflower and soybeans have been grown in the past, but little is being produced commercially at this time.

Farm cash receipts for canola and flax over the first 9 months of 1993 were $149.9 and $27.1 million, respectively.

Two oilseed crushing plants are located in the province, one in Altona and one in Harrowby. The Altona plant is an integrated facility producing consumer products such as salad and cooking oils. The Harrowby plant produces crude vegetable oil. Both are owned by CSP Foods Ltd., a subsidiary of Sask Pool. Flax currently is shipped to the U.S. for processing into oil.

Depending upon production levels and world prices, Manitoba will export approximately 55 percent of the canola seed grown in the province. The primary market for the seed is Japan, although in 1993 significant quantities of seed were shipped to the U.S. Virtually all of the processed oil is shipped elsewhere in Canada or to the U.S. for further processing. The majority of the meal is used locally as animal feed, but significant quantities are exported as well.

Notable Industry Characteristics

Because of the nature of the industry, oilseed processors operate in a global market. Semi-processed oil and meal are traded on the world market in a similar fashion to the raw seed. For this reason, international trading agreements, and currency values have a direct impact on local operations.

Winnipeg is the location of the head offices of the Canola Council of Canada (CCC), the Flax Council of Canada (FCC), and the Canola Crushers of Western Canada. These organizations, which represent both producers and processors, have provided excellent support for their respective industries. Services include information sourcing, research co-ordination, lobbying, and marketing assistance. It has been suggested that Manitoba should capitalize on the presence of these agencies and their potential influence in attracting additional value-added processing to the province.

Manitoba grown oilseeds normally produce oil of high quality. Some difficulties have been encountered with meal quality in the past, but these have been overcome in recent years. The quality image enjoyed by the industry is due, at least in part, to the excellent reputation of the Canadian grading system.

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\(^{16}\) Agriculture Statistics, Economics Branch, Manitoba Agriculture.
Extensive plant breeding of canola has occurred at the University of Manitoba (U of M) over the past 30 years. The U of M, along with the University of Saskatchewan, have been recognized as world leaders in oilseed breeding. Significant effort is being put into finding edible flax oil (linola) varieties, and improved sunflower (sunola) varieties with the objective of designing oils of high nutritional and functional value.

The processing of oilseeds normally begins with the separation of the oil from the meal. Although this can be done on a small scale, to be commercially viable, a "crushing plant" must be of a certain size to capture throughput efficiencies. For this reason, entrepreneurs operating in this sector must look to oil, meal, and other crushing by-products from existing crushing plants as the source of their raw materials. There is currently an excess of oilseed crushing capacity both in Manitoba and across the west.

Flax straw has been used for its unique fibre characteristics. This additional market adds to the competitiveness of this crop, and represents both a current and potentially expanding processing opportunity for rural Manitoba. In addition, a company has been operating in rural Manitoba for almost two years producing a line of breads and other flour products using flax as a key ingredient.

**Issues in the Oilseeds Sector**

The following issues and responses relating to the potential for increased value-added processing within the province were raised at the oilseed sector meeting and in follow-up discussions.

**Production Related Issues**

There has been a positive attitude toward growth and development in this industry since the early years of success of canola some 25 years ago. The current attitude is mixed, ranging from pessimism to optimism. Most of the pessimism stems from the current subsidy wars between the U.S. and the EEC and the damaging impact these have on the development of the local industry.

Generally there has been sufficient information available to canola, flax and sunflower growers.

Few technological constraints face oilseed producers. Because of the ongoing battles against plant diseases and insect damage, however, there is an ongoing need for research. Cut-backs in research funding may cause constraints in the future. Because of the successful canola development program, a significant oilseed plant breeding expertise is available.

Oilseed producers were asked if they can compete on a cost per unit weight basis with growers in other regions. It is the position of the Canola Council of Canada that the Canadian prairie farmers are the least cost producers of canola in the world. The Flax Council of Canada believes this is true for flax as well. The only other region in the world which might compete is Argentina.

In addition to being cost competitive, the quality of Manitoba canola and flax oils is considered to be superior to other production regions. However, as with most other field crops, oilseed production and quality in Manitoba are susceptible to weather conditions. The same problem applies to flax straw.

Among regulatory constraints to the development of the industry is difficulty to license new oilseed varieties in Canada owing to the requirement for long and arduous field trials and proof of health safety. Also, Manitoba is the only province in which legislation prevents the adoption of a check-off program to support research. This makes it difficult to find funding for production or processing research.

Among environmental issues, the disposal of flax straw represents a challenge for some, but an opportunity for other producers.
Processing Related Issues

Oilseed processing technology is specific and sophisticated. Outside the existing plants, there is little technology available within the province. However, a wealth of information exists at the POS Pilot Plant in Saskatoon.

There is significant knowledge of the nutritional properties of vegetable oils within Manitoba. Processors believe there is a window of opportunity to capitalize on the nutritional attributes of Canadian vegetable oils as long as nutrition labelling is a major issue in the food industry.

Economy of scale serves as an economic constraint to value-added processors. Because of the smaller plant size, higher wages, and higher miscellaneous costs, Manitoba oilseed crushing plants show a slightly higher unit cost of production than many of their competitors. However, this gap has narrowed considerably in recent years. There is optimism that the smaller Canadian plants will be able to be competitive in selected markets if the value of the Canadian dollar stays below 75 cents U.S.

One significant environmental issue is the fact that the oil extraction process normally involves use of highly flammable solvents. Care must be shown in the transport and use of these materials.

As many of the existing types of packages for oilseed products are manufactured out-of-province, there could be a significant cost disadvantage for Manitoba processors looking to enter the production of consumer products.

Three issues were raised by processors in response to regulatory constraints. First, margarine colouring legislation, which is still in effect in Ontario, continues to be a problem for the industry in general, and to the potential for expansion of the Manitoba crushing industry in particular. Second, although the Federal Government is working to address the issue of licensing of genetically engineered crops, the industry fears that the licensing process will be so cumbersome that it will prevent Canadian companies from using this exciting technology to get the jump on their competitors. Third, under supply management, poultry and dairy producers have not been sufficiently concerned about the use of high priced soy meal imported from the U.S., because it was factored into the cost of production formula. If this approach changes as a result of the recent GATT agreement, the door may be opened for greater demand for locally produced canola meal.

Marketing Related Issues

Oilseed producers and processors encounter logistical constraints in moving their product to market. Access to rail cars on a timely basis has been an ongoing problem for this sector. Oilseed processors are particularly concerned about the transportation policies in Canada, all of which have been developed with a focus on the export of raw product. No specific impediments were identified should a value-added processor of consumer products locate in rural Manitoba.

Market demand for new product entries is limited. Standard products such as margarine, salad oils and cooking oils currently are supplied by a number of competing multinationals. Greater marketing success for a start-up company would occur in niche markets and developing oil based products to meet these special market needs.

Market access would not be particularly impeded for a cottage industry in rural Manitoba. A rural Manitoba processor of unique consumer products based on vegetable oils may be relatively free of competition in local or regional markets. Because oil-based products can be made shelf stable, a rural processing location may be preferable to an urban location.
Competition in the crushing business would come from CSP Foods and from the several multinational companies operating in western Canada. Competition in the consumer business would come from multinationals such as General Foods, Hunt Wesson and Unilever. Competition for producers comes from major soybean and corn processors located in the upper mid-west U.S. The growing strength of oilseed producers in other nations cannot be overlooked.

The reduction in tariffs on both seed and raw oil under CUSTA/NAFTA is helping open up U.S. markets. Mexican markets might begin to materialize, but this is not expected to occur in the near future.

A reduction of subsidies (GATT) would definitely help this sector. Current European and U.S. subsidies are reported by Canadian processors to be considerably higher than those in Canada. Unfortunately, from the oilseed crushers point of view, the reduction in tariffs will be occurring too slowly and will not go far enough to alleviate the impact of foreign nations’ export subsidies on the Canadian industry.

Two domestic regulations impact negatively on marketing in the sector. First, the Canadian transportation policy in general has a significant negative impact on this industry. There is also concern about the possibility of a CN/CP merger and the effects this would have on competitive freight rates.

Second, the crushing industry is very concerned about the tariff differential placed on seed and oil by certain foreign countries. By enticing Canada to supply raw seed instead of processed product, countries like Japan and Korea are building their crushing industries at the expense of Canadian value-added industries.

One final concern was expressed regarding oilseed processing in rural Manitoba. In the past, the governments of Alberta and Saskatchewan have offered attractive financial incentives to oilseed processors to locate in their provinces. If this continues, there is risk of losing some or all of the industry offices located in Winnipeg.

Oilseed Sector Analysis

Significant growth in the oilseed industry could occur if the grain transportation issues currently under discussion are resolved in a favourable way to the oilseed processor. Also, changes resulting from GATT are a step in the right direction, but there remains a level of pessimism that too little was accomplished in the way of reductions of tariffs, and other trade barriers, to solve some of the structural problems facing oilseed processors.

It is unlikely that a start-up company would have either the financial resources or the technological know-how to compete with existing crushing plants on primary processing of oilseeds. Some potential might lie in producing unique oilseed crops and arranging for the oil to be custom extracted at one of the existing crushing plants. This could lead to further opportunities in converting the raw oil or meal into higher valued end products. There is some potential to manufacture a variety of consumer products starting with oil or meal currently produced in the province. This could include both food and non-food items.

In view of the natural competitiveness in producing canola and flax seed, and the existing presence of two crushing plants in the province, there may be an opportunity to attract an established vegetable oil processor to the province. As acceptance of canola oil increases in the U.S. and as the tariff levels drop, Manitoba may become a prime location to produce value-added oil-based consumer products for distribution into the American market.

The search for nutritional quality in canola oil, and the selective breeding for these traits, have established canola as one of the premier quality oils in the world. Expectations are high regarding similar success with linola and sunola.
FRESHWATER FISH

Industry Scope

There are an estimated three to four thousand commercial fishers in Manitoba. Approximately 2500 are licensed with the provincial fisheries branch. The remainder are classified as helpers. Commercial fishing in Manitoba is carried out on an estimated 57,000 km$^2$. The three largest lakes (Winnipeg, Winnipegosis, and Manitoba) combined produce about 70 percent of the annual catch. The average income per fishers in 1993 was about $6,700.

Processing is done almost exclusively at the Freshwater Fish Marketing Corporation (FFMC) located in Transcona. This crown corporation is operated with a staff of approximately 200 people. A limited amount of processing occurs at other locations throughout the province where special arrangements have been made. In these cases, product sales are localized.

The annual commercial fish harvest in the province is in the 13 to 15 million kg. range. The Manitoba catch represents about 70 percent of the fish processed at FFMC’s plant. The remaining 30 percent comes from Saskatchewan, the Northwest Territories and Northwest Ontario. The total market value of fish processed at this plant has been steady at around $50 million over the last several years. About one-half is received by fishers in Manitoba.

Whitefish, pickerel, sauger, pike and mullet make up almost the entire commercial catch within the province. Small quantities of perch, tullibee, trout, goldeye and carp also are processed when supplies and markets are available. According to the 1990 anglers survey, an estimated 11.6 million fish were caught in the province that year by sport fishermen. Anglers reported releasing 72 percent of this catch. A growing quantity of fish reportedly is caught and sold (or traded) privately, and does not appear in the provincial statistics.

Approximately two-thirds of the sales made by FFMC are to the U.S. The remainder is sold throughout Canada, with only a small quantity exported to offshore markets.

Aquacultural activities are limited. One significant fish farm is located in the City of Winnipeg and a few start-up operations have been reported elsewhere in the province. The provincial government operates two hatcheries within the province, but there is not sufficient funding for major stocking programs of lakes. The province is home for the Freshwater Fish Institute, one of the Federal Department of Fisheries and Oceans’ major research facilities.

Notable Industry Characteristics

Federal legislation introduced in 1969 requires that all fish caught in the prairie provinces, the Northwest Territories, and a portion of Northwest Ontario must be marketed through the FFMC. This arrangement affords fishers some level of equity in the marketing of their product, and a share in the profits from value-added processing, but it effectively eliminates entrepreneurial activity outside the system. Under the terms of the legislation, the corporation’s Board must be comprised of a majority of persons actively engaged in fishing. Any profits from processing and marketing either are retained for capital upgrading or returned to the fishers as dividends.

Persons wanting to purchase fish either for processing or for selling to retail outlets, must do so through the FFMC. There are a few exceptions to this rule where a processor has direct connections to fish quota.
In such cases, approval to by-pass the FFMC must come directly from the corporation. Because fish quotas are involved, approval also must be received from the provincial Minister of Natural Resources.

Both Alberta and Saskatchewan have negotiated with the federal government to allow any local processor to buy fish directly from fishers, provided they do not market the end product out of province. It has been estimated that FFMC would lose about 7 percent of their sales if a similar agreement were to be reached in Manitoba. A change in the system requires a two-thirds majority vote by the fishers, or the passage of new legislation. Past efforts to allow this to occur in Manitoba have not been successful.

There has been talk of change in the system in Manitoba, but there is no consensus on what should be done. The situation is extremely complex as change would impact upon Native and Metis rights, employment in remote areas of the province, costs associated with federal inspection of fish, and a host of other issues. Under the current arrangement, the provincial government treats fishers as their clients.

Recently, the ratio of commercially desirable fish to those which have limited commercial demand, has decreased in most Manitoba lakes. In some cases, as much as 90 percent of the catch is under-utilized species. During winter fishing, these fish are left on the ice to die rather than being returned to the lake to compete for food with the commercial species. It has been estimated that from 50 to 90 million pounds of less desirable fish are wasted each year.

Fishing is controlled within the province through a quota system. Quotas can be bought and sold provided that specific rules laid down by the province are followed. Fishers are reluctant to keep and ship low valued fish to FFMC because it results in reduction of the quota of higher valued species.

Fish farming (aquaculture), which is growing rapidly in other parts of the world has not been encouraged to any great extent in Manitoba. An initial industry developed on production in natural winterkill lakes, but biological problems obviated consistent production, and markets could not be established. Little effort has gone into research to eliminate problems encountered.

Issues in the Fish Sector

The following issues and responses relating to the potential for increased value-added processing within the province were raised in discussions with sector representatives.

Production Related Issues

Manitoba's fishers generally do not see potential for significant growth within the industry. The negative attitude stems from stagnant sales and prices that have been low relative to the cost of catching, transporting and processing fish. There is a divergence of opinion whether things can be improved, and if so, how this can be done. Some strongly support the current marketing system, while others believe an open marketing system would be preferable.

Extension services provided by government and the FFMC have routinely provided general information and answers to any questions the fishers have had.

Similarly, Manitoba fishers have enjoyed excellent technical support from both the provincial and federal governments.

Being economically competitive has always been the big stumbling block for the industry. It has been difficult to compete with ocean fishing over the years, and more recently with U.S. fish farms. Much of the difficulty stems from the slow growth rates of fish in cold waters, and from the distances from the lakes to
the marketplace. It is not known if caged culture or aquaculture could be done competitively in the province. There is a question of whether or not FFMC would become involved if a fish farm started raising competitive species.

The natural fishery is highly regulated, but this is understood to be necessary to properly manage a public resource. Some constraints occur where social issues must be balanced against resource management issues.

Manitoba has enjoyed a reputation for clean unpolluted lakes and rivers. To maintain this valuable status, care must be taken to avoid pollutants from entering the system. The industry faces one significant environmental challenge. The large quantities of under-utilized species that are left on the ice, or thrown in the bush to rot, can cause localized disease problems.

Processing Related Issues

FFMC has encountered some difficulties in securing technology to match that of competitors. Generally, fish processing is technically demanding. The phasing out of the product and process development program at the Freshwater Fish Institute has left FFMC with limited public sector technical support.

Economic constraints to value-added processing can be attributed to high transportation costs. The long supply line from the lakes to the FFMC results not only in higher raw product costs, but also in some cases, the fish quality suffers. Similarly, the distance to end markets means much of the fish is sold in a frozen form. Fresh fish sells for approximately twice the price of that of frozen fish.

Processors must face one significant environmental issue. The combination of the large quantities of water required for fish processing, coupled with the potential for spread of disease means that care must be taken in dealing with plant effluent. These challenges are not unique to Manitoba.

Quality packaging is available within the province.

Regulatory constraints apply only to potential processors. The terms of the Freshwater Fish Marketing Act, and the past actions of the FFMC, virtually block entrepreneurs, or existing processors, from entering, or expanding, the processing business in a serious way within the province.

Marketing Related Issues

The transport of fish to the Transcona facility represents a serious logistical constraint to the sector. Although transport of product into the U.S. market creates challenges, FFMC does not view this as a serious problem. However a private processor may face greater problems. Much would depend upon location of the plant, the primary markets, and the approach taken. There is a general belief that privately operated plants strategically located at the southern ends of lakes Winnipeg and Manitoba, could successfully access domestic and U.S. markets. Greater difficulties would be faced by operators in remote areas of the province.

Market demand may accommodate new products. Although the consumption of fish has been stable over the past five years, there is reason to believe that new fish products of high quality and nutritional value, and attractively presented, would be well received in the marketplace.

Similarly, rural cottage industries may be able to access markets because restaurants and retailers understand the delicate nature of fish, and would be receptive to working directly with a local shipper.

If local processors were allowed to operate, they would face stiff competition from FFMC and other established sellers in local markets. Existing competition for FFMC in U.S. markets comes mainly from the
Great Lakes fishery and from ocean fisheries. In the future, former Soviet Union countries could become significant competitors.

The FFMC reports that the signing of CUSTA and NAFTA will be useful in solidifying an already good trading relationship with both nations. A reduction in quotas and tariffs (GATT) could lead not only to some increase in sales abroad, but also to downward pressures on local prices. A greater effect would occur if the GATT agreement leads to significant changes in the current marketing system.

Domestic regulations would impact negatively on the sector in that the need for processing plants to be built to national and international standards will affect the capital cost of any new operations.

Fish Sector Analysis

Existing legislation, which places virtual control of the industry in the hands of the FFMC Board of Directors, means that the future of value-added processing in the province rests with this crown corporation unless legislation changes. FFMC management are of the opinion that markets for processed fish products using Manitoba raw product look rather bleak given the current non-competitive situation regarding our raw product. This view, however, is not shared by all associated with the industry. There is a strong feeling by some that niche markets are available for high quality products, as well as for novel products made from under-utilized species. Several past attempts at producing such products have not led to commercial activity.

It would appear prudent to assess each of the previous attempts to produce novel products from under-utilized species and arrive at some conclusion whether there truly are opportunities or whether it is just wishful thinking that profitable markets can be found. The greatest potential for growth appears to lie in raising selected species in fish farms. It is unclear whether the government or FFMC would allow someone to fish farm and independently market species currently handled by the corporation. There may be significant potential to air freight fresh or frozen product from northern Manitoba to Asian and European markets.
SECTION 4

REGIONAL ISSUES

Meetings held in three different locations throughout the southern portion of the province resulted in lively discussion on each occasion. A total of 26 producers/entrepreneurs attended the meetings held in Brandon (Western Region), Portage la Prairie (Central Region) and Beausejour (Eastern Region). In each case, provincial agriculture representatives were asked to supply names of producers in the area who had an interest in value-added processing.

The discussion was unstructured. Participants were advised both by FAX, and again at the outset of each meeting, of the main purpose of the study. They were then given the opportunity to respond verbally as they saw fit. As the discussion ranged across a number of topics, there was no attempt made to draw specific conclusions, or consensus. Given this situation, the study team felt the best way to present the tenor of the discussion was to quote, or paraphrase, all participant comments.

The study team has chosen not to interpret these statements, nor do we necessarily agree with them. Comments have been classified into six categories: 1) attitude, 2) regulation, 3) marketing, 4) competition, 5) training, research and technology, and 6) investment. Some comments, of course, relate to more than one of these categories.

Attitudinal Statements

"There is an attitude problem when it comes to investing in agriculture ventures."

"Manitobans seem to have a somewhat different attitude to investing in agriculture than they do in Alberta."

"The government has trouble looking at something new and unique."

"We are very good producers, but we are not very good marketers."

"Let's not abandon our strengths on the production side by over-focusing on value-added."

"We should not forget the fact that value-added is a different game than production."

"A large part of the problem with value-added is attitude. One failure in an area tends to turn people off future attempts to start a new business."

"Innovative farmers are getting around the system."

"We are supposed to own UGG, the Pools, and the Wheat Board, but our voice is seldom heard. We need to get rid of the system and let farmers decide their own fate."

"We haven't even got control of our own raw material. Now is the time to talk about this problem. Even Saskatchewan farmers are changing their thinking."

"I have invested in a Saskatchewan joint venture due to a lack of interest and commitment on the part of Manitoba companies and government."

"Perhaps the majority of 'small' producers should stick to production and leave processing to others."

"We need to do our homework and learn more about how the U.S. supports its farmers. We are our own worst enemy -- our government wants to advertise every nickel they spend on farmers."
"Blue and white collar workers must learn to work together. Elected officials and
government union leaders must work together to set the tone for the rest of society."

"Producers must get on with the job and invest their own money and time. If bureaucrats
stay out of the way, value-added will happen."

"The government is looking for help. We must step forward."

"After a half century of protective legislation, it will be hard to change our ways. We are
a product of our environment."

"We have a 'can't do it here' attitude problem."

"Manitoba is short sighted in not processing horse meat in the province."

"Many Manitoba farmers have a low self image and don't believe they can do anything
but farm."

"Alberta will continue to steal our industry if we don't change our ways."

"In Europe, there are many more people willing to work for someone else. Here,
everyone looks after himself first. This is an attitude problem. Management skills may
have to be imported from Europe."

"The industry is plagued by short term thinking."

"The focus is too much on production agriculture in this province."

"Manitoba suffers from a synergism of negativism -- unless we change the brain drain
will continue -- one of our major companies has lost 14 of its best young people to
Europe."

"More people need to understand what corporate profits are used for."

"Although Manitoba has enjoyed an enviable position in serving as the grain capital of
Canada, as the focus has shifted to value-added processing, other locations (notably
Saskatoon) have begun to take the lead in researching new opportunities."

"You spiral up, or you spiral down. Manitoba is spiralling down while Alberta and
Saskatchewan are spiralling up."

"Feds put up dollars, but the province just isn't there. There is a fundamental problem."

"Maybe they take agriculture for granted."

"Money spent on health and on education, none left for agriculture and food -- not enough
votes."

"As a result of different attitudes, flax processors chose to locate in the U.S. even though
Manitoba is the prime production location."

"For too many years, governments have been listening to the Prairie Pools who represent
farmers who don't want change."

"Governments should start by talking with existing companies with head offices in the
province and see what can be done to help them."

"Food processing wastes help sustain an animal industry -- we should build on the
synergy."
Statements About Regulations

"Alberta is buying industry from Manitoba with their subsidies. The $21 per tonne offset on imported barley is a prime example."

"Regulations governing meat processing plants need to be looked at."

"There is not enough producer incentive with the COPF for the feather industry. There is no incentive to do anything but pass on the basic costs. The government has legislated business in our sector and this has to stop or there won't be any feather industry."

"In the turkey industry we are happy with the progress we have made. It takes planning and time. There is cooperation between private business, producers and the marketing boards. It has been slow progress over a long period of time. We won't be able to compete with the dollars down south if the boards are lost."

"The Manitoba Egg Board has a grow for export plan. This ideology destroys supply management. There is demand and it isn't being met by local producers. We are reacting too late and battling regionalism. On the assumption marketing boards will be a thing of the past, Ontario has arbitrarily allocated 35% more chickens in 1994 than in 1993 to wash out others even though Manitoba and Saskatchewan are the lowest cost producers. Manitoba cannot sit back and let this happen."

"It is important we have marketing boards so we have certain quality and quantity. This is one advantage. There has to be a relationship between the grower and buyer."

"Inter-provincial distortions of trade need to be eliminated. In some cases it is easier to ship to the U.S. than it is to a neighbouring province."

"Canadian legislated protection is a problem. Some producers are protected more than others."

"There is a lack of federal and provincial governments giving policy guidelines. This makes it difficult to make decisions at the farm level. The system doesn't know who does what."

"The biggest impediment to growth of the industry is marketing boards. They totally stifle innovation and creative thinking. When you try something new and creative, you are threatened with a law suit."

"Twenty years of supply management has left many farmers unable to think clearly about their business. We must get rid of supply management and get on with being competitive with the rest of the world. We go to war to defend democracy and free enterprise, then we legislate against it in our own country."

"I feel sorry for the guy who bought high priced quota."

"I am impeded from doing business when someone tells me what my transportation, elevation and selling costs are going to be."

"When I started farming, I liked the supply management system, but now I see the rigidity and what it has done to stagnate the industry. This trend should be reversed. The producer is just a guy pushed to produce for the system. Everything is top down."

"We must get rid of the layers of politics in agriculture. I was forced to go into 'exotic' production to avoid a battle with the supply managed sector."
"Interprovincial trade barriers are worse than those incurred on exporting to the U.S."

"Canada is at a cross-road. We must send a clear message to our bureaucrats and politicians. Act now, or lose what we have left. With NAFTA and GATT opening up markets, we know the large U.S. multinationals won't be sitting idle. We need a well thought out game plan."

"If the bureaucracy is eliminated, farmers will be left to fend for themselves. The non-competitive farmer will fold, but the efficient ones will flourish. We look forward to having the right to do value-added on our farm without having to buy from the board."

"Pretty soon the debt will force us to get on with the job as they did in New Zealand."

"The trucking industry has created more jobs than the railways ever did. The Crow rate has 'killed' us."

"Licensing of farm chemicals is still a problem. If a product is OK to use in Minnesota, why is it not OK to use in Manitoba?"

"Licensing legislation is different from province to province."

"The requirement for visual distinguishability of grain as a requirement for licensing is an antiquated system. The system stifles local initiative."

"I disagree. We should not always accept U.S. results. They will issue a gag order if there is any suggestion that the product might be harmful."

"The cost of custom killing at a federally inspected plant is $40 versus $22 at a provincially inspected plant. Another example of an impediment."

"Even with a $15 per hectolitre subsidy in the U.S. dairy farmers are starving. The average age of the dairy farmer in Wisconsin is 58."

"The use of growth hormones in the U.S., which are banned in Canada will be an impediment if trade restrictions are lifted."

"The three grade wheat system is a problem. One kernel over the limit causes a big change in payment."

"I wanted to start a game farm several years ago, but the Manitoba Government would not allow me to do so."

"Manitoba still has outdated laws concerning the rearing of wild animals. We are out of step with other regions of the continent."

"The Wheat Board coerces the farmer by the way they handle final payments."

"People don't see the link. You cannot have subsidized freight on raw product and also have value-added processing."

**Marketing Statements**

"We need a cooperative approach. Perhaps government could play a role of getting producers and processors together. Vertical co-ops rather than horizontal co-ops might be the answer in the future."

"Pools, co-operatives and boards have been good in helping farmers find markets, but there have been problems with them as well."
"We need to move towards small clubs to share information. Right now we say here's the stuff I've grown, now you sell it."

"When there is a change in the market, individual producers can move quickly, but a cumbersome system like the Wheat Board cannot."

"Use of the futures market will become increasingly important over the next ten years."

"A financial institution would have to be involved if producers were to start using the futures market directly."

"After signing a contract, producers feel they are at the mercy of the big companies."

"Producers involved with unique products come together naturally to sell their products. The Asian market is huge and untapped. In specialized items, it is extremely difficult to obtain cost of production figures. Most of us don't count all of our costs and therefore do ourselves a disservice. There is great potential in unique markets, but there are a tremendous number of problems to overcome."

"A poultry amount of money has gone into market research."

"The cereals and oilseed industries have been slow to develop due to the artificial impediments put in place by the Wheat Board, the pools and the railways. All are afraid of competition, and all are doing mediocre work."

"If the Wheat Board is so good, why are they afraid to compete on an open market?"

"I deliver 100 loads a year into the U.S. for value-added processing. This could all be done in Canada with changes to the system."

"Now is the time for change with what is happening at the NAFTA and GATT tables."

"The current system pays little premium for quality."

"We can produce product competitively, but we often face unfair trade practices from the U.S."

"Small companies must attack niche markets and not take on the large corporations."

"There is an impediment to shipping processed wild boars into the U.S. They do not trust that we have not mixed in some domestic pork into the shipment. Our processing is done in North Dakota for this reason."

"There are not enough 'exotic' breeds yet grown in Manitoba to warrant setting up a dedicated federally inspected processing facility."

"New products require large investment in consumer education."

"If Canadians don't mind buying chicken with yellow fat, then cheaper U.S. product will start to enter Canada."

"The Canadian dairy industry can be competitive provided the government takes care of the surplus as is done in the U.S."

"Pig production has doubled in the past 10 years, but we are now starting to kill our market due to over production."

"More effort is needed in marketing our product into the U.S. where Canadian pork is seen as a premium product."

"We seem to forget that the consumer is king in our industry."
"We realized a few years back that we had to focus on markets if we were to have a viable farming operation. We went out and found markets for products, then we came back to the farm and produced to fill the contract. We haven't looked back since."

"You must be stubborn enough to say to a customer -- OK if you can buy cheaper elsewhere, go ahead -- we owe it to our producers to get more money for our quality product."

**Statements About Competition**

"Another problem is the insanity of provinces competing amongst themselves for foreign markets. There needs to be more cooperation."

"This inter-provincial competition is happening in the poultry industry as well as the red meat industry. We need to address this problem at the federal level."

"We have to be competitive to start with and we have to know what our natural advantage is. You have to be competitive with world class plants unless you can identify a specialty market. There are attitude problems."

"We must look at markets and then come back and see where our production strengths can match these markets."

"The problem comes back to being competitive. We have come out of 'sync' with the global economy."

"The processor has to be competitive too."

"When things get bad in our business, we can either get out, or get more efficient. We have done comparative cost of production studies with other locations. You cannot base competitiveness on cost of land."

"The processors seem to be more unable to change with the market than the producers."

"We seem to be unable to get good COP, and rules and regulations, from the U.S. Why can't our government access their information?"

"Research, capital and hard work are the three ingredients needed for success."

"It is OK for processors to make money, but if the producer doesn't remain solvent, we will again be in trouble down the road."

"If others don't know your COP it gives you an advantage."

"Small manufacturers can survive if they produce a quality product and if they are prepared to offer customer service."

"High gas taxes in Canada put us at a disadvantage to our American counterparts."

"Europeans should be brought in to operate processing businesses. They have first hand practical skills, not textbook learning as is the case here."

"When a propane company has farmers over the barrel due to damp grain, prices always seem to rise. Regulation restricts us from importing cheaper U.S. product."
Statements About Training, Research and Technology

"Entrepreneurs often lack business skills."

"Chicken wings are brought into Canada by an American marketing company because our product is said not to meet their standard."

"The cost of freight and interlining is a problem. Some rural areas need gas lines so there could be processing. There are also limitations on rural telephone services for private lines for FAX and other communication systems such as cellular phones."

"We also need an educational process. We need entrepreneurial skills and we need examples of how success has been achieved."

"There is need for organizational training -- how to set up a vertically integrated organization."

"Research on yield was king in cereals. We need to focus more on cost per pound and quality."

"We need assistance to do research."

"Labour is a constraint in the meat packing industry."

"Knowing regulations, and knowing what to do with by-products are also keys to success."

"Environmental concerns must be respected, but there should be a massive educational program in the schools to teach young people the facts about agriculture. People growing up in the city don’t understand some of the challenges which farmers face."

"We should trust safety trials conducted in the U.S., Denmark, etc. and not incur the cost and time to duplicate their efforts."

"Technological synergism is lacking in Manitoba."

"Maybe there is a need for a bridging organization to link university and industry."

"Monsanto, with their Canadian head office located in Winnipeg, and their production facility in Manitoba, chose to do their research at the University of Saskatchewan."

"Manitoba is the leading producer of buckwheat, yet virtually no research is being done on the crop."

Investment Statements

"Operating funds are a problem -- banks call the shots -- it is easier to get funding for capital expenses than for operating. Farm Credit Corporation funding is not available for processing."

"We have a system that exports capital in the form of RRSP’s. There is no incentive to invest in local business that compares with the returns on an RRSP."

"Alberta farm reps talk about a 16% ROI on farm investments, but we don’t see this here."

"People don’t want to invest in small operations. There is a mega farm syndrome."

"Investors should be given tax breaks as compensation for investing in risky businesses."
"Previous disasters tend to turn people off investing in the latest hot idea."

"There have been disasters in value added areas because it is high risk. Too many projects have been started without adequate research. Money seems to be available for expansions only."

"Limitations caused by securities commission regulations can impede development projects."

"We are in dire need of a meat processing plant in this part of the province. The federally inspected plant here in Beausejour should be re-opened."

Europeans don’t tax money that is re-invested in a business. Perhaps we should look at this here.

"We need to find ways of jump-starting new businesses. Too many projects die waiting for the letter perfect business plan to be prepared."
SECTION 5

GENERAL CONCLUSIONS

As the study team progressed through the meetings several key issues were repeatedly heard. The most significant of these were as follows:

1. The supply management system, which has been designed to give stability of supply for consumers, and profitability for producers, is viewed by the vast majority of people interviewed as the major impediment to value-added processing in Manitoba. It was interesting to note that even some producers operating within the system identified a need for structural change.

2. There was a clear signal being sent that Manitoba farmers can produce commodities at competitive prices in virtually all sectors. The only sectors which face a potentially insurmountable challenge are the fruit and vegetable sectors, and only for those crops which exhibit a safe storage limit of less than about 6 to 8 months. In other sectors, Manitoba producers were not saying they would be competitive in all circumstances, but there was a consistent theme that, on equal terms, and for crops/industries suited to their location in the province, they can be competitive over the long term.

3. Another common theme was the need for the federal government to continue to strive for fair trade practices so that Canadians are able to gain fair access to foreign markets without an ongoing threat of unfair trade practices. There is an obvious reluctance to invest in expensive processing equipment if, for example, the U.S. market can be arbitrarily closed overnight due to the introduction of an unexpected trade barrier.

4. There was a clear message that Manitoba producers, processors, and government must find innovative and equitable ways of working together for common good. Future success can only be built on strong mutual respect and a true team attitude. Whether the friction between certain producers and processors stems from outdated thinking, or from outdated regulation, it must come to an end if significant increases in value-added processing are to occur.

5. Although there were mixed messages, most interviewees identified a need for government to take the lead in setting the tone and overall direction for the industry. Many recognized the opportunity that currently exists to find new ways to build on the trade agreements which have been signed over the past few years. By taking the lead, most entrepreneurs mean for governments to reduce, or eliminate, the remaining trade barriers and restrictive legislation which continue to impede the development of a vibrant value-added processing industry.

6. It was clear from the discussion that it will be an ongoing uphill battle to establish value-added processing in Manitoba if the transportation policy continues to favour export of raw product. The timely resolution of this long-standing impediment is essential if value-added objectives are to be achieved.

7. Although the meetings revealed that there are many innovative and entrepreneurial activities going on in the province, there was a general fear expressed of losing ground to other regions of the continent if we fail to keep up with changing technology. Participants repeatedly mentioned the need for Governments and universities to continue to supply the basic research support in key subject and commodity areas.
8. A fair number of participants identified an inability to obtain relevant data in their sector as an impediment. The point was made that most statistical records meet the needs of the producer and/or the exporter of raw product, but not the local processor.

9. Access to capital continues to challenge the industry. It is clear, however, that funding mechanisms are in place for start-up businesses, but only those which can make the right disclosures on paper to people or organizations with money. Money lenders are sceptics, but they are paid to be this way. Those seeking money should remember that most lenders will not keep their job if they don’t continue to approve loans. Entrepreneurs may fair better if they thought of the sceptical loan agent as an ally helping them find the weak areas of their proposed new business.

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