

STRATEGIC ANALYSIS OF THE YUKON AGRICULTURAL INDUSTRY

Prepared by:
David Loeks
TransNorthern Mgt. Consulting
Whitehorse, Yukon

March 14, 2003

HD
1790
.Y8
.L7
2003

**STRATEGIC ANALYSIS
OF THE
YUKON AGRICULTURAL INDUSTRY**

YUKON ENERGY, MINES
RESOURCES LIBRARY
BOX 2703
WHITEHORSE, YUKON Y1A 2C6

Prepared for:

**Government of Yukon
Department of Energy, Mines and Resources
Agriculture Branch**

By:

**David Loeks
TransNorthern Mgt. Consulting
Whitehorse, Yukon**

March 14, 2003

Table of Contents.

| | |
|--|-----------|
| EXECUTIVE SUMMARY | 1 |
| 1.0 INTRODUCTION..... | 1 |
| 2.0 SITUATION ANALYSIS..... | 2 |
| 2.1 Industry Overview | |
| 2.2 Agricultural Policy Framework Agreement | |
| 2.3 Yukon Agriculture Policy | |
| 2.4 Current Yukon Agricultural Programs and Initiatives | |
| 3.0 STRATEGIC ANALYSIS OF INDUSTRY | 7 |
| 3.1 Multi-Year Development Plan | |
| 3.2 Agricultural Cost of Production Study | |
| 3.3 APF Consultation Results | |
| 4.0 POLICY AND PROGRAM LINKAGES | 13 |
| 4.1 Key Players | |
| 4.2 Supporting Players | |
| 4.3 Legislative and Policy Gaps | |
| 5.0 STRATEGIC DIRECTIONS FOR INDUSTRY DEVELOPMENT | 16 |
| 5.1 Multi-Year Development Plan Revisited | |
| 5.2 Structure for an Agricultural Development Strategy | |
| 5.3 General Development Strategy for Yukon Agriculture | |
| 5.4 APF Support to the Development Strategy | |
| 6.0 STRATEGIC PRIORITIES FOR GOVERNMENT | 27 |
| 6.1 Roles and Responsibilities | |
| 6.2 Priority Steps for Government | |
| APPENDICES | |
| Appendix 1. Agriculture Branch Programs | |
| Appendix 2. Complementary Programs | |
| Appendix 3. Multi-Year Development Plan Sectoral Strategies | |
| Appendix 4. EMR Goals, and Objectives circa 2002. | |
| Appendix 5. Yukon Party Platform relating to agriculture | |
| Appendix 6. Department of the Environment wildlife issues. | |
| Appendix 7. Canadian Food Inspection Agency | |

EXECUTIVE SUMMARY

Purpose:

The purpose of this project is to conduct an analysis of the Yukon agriculture industry in order to identify options, and recommend strategic directions and linkages for its development over the next 5 years.

The report will assist the Department of Energy, Mines, and Resources in making recommendations to the Minister and to the government regarding:

1. Key strategic directions for the development of the agri-food industry and the agriculture sector in the Yukon;
2. New or improved government policies and programs that may be needed to facilitate this development; and
3. Priorities for programs and projects that will assist the development of the industry over the next five years within the context of the federal-provincial-territorial Agricultural Policy Framework Agreement (APF).

The 2000 Census reported 170 farms with 29,318 acres; 7,015 acres were in field crops. Total farm capital was over \$50 million - a *ten-fold* increase since 1986. The value of sales was nearly \$4.2 million in a territorial population of 30,000 (\$140 sales / person). Growth in farm acreage, farm capital and sales has steadily risen since the 1996 Census.

Overall, the Yukon farm sector operated at a net loss in 2000. Total gross farm receipts for the sector were \$4,194,864. These were exceeded by total farm operating expenses of \$4,748,443. These Census figures were obtained in an adverse year of heavy rains resulting in severe crop losses. Compensating for these operating losses are real gains in net production and in total farm capital. At this stage of development it is fair to say that the industry operates at close to the breakeven point.

Opportunities

In 2000 the Agriculture Branch and Agriculture Canada sponsored a "Multi-Year Development Plan" (Serecon Mgt. Consulting). The MYDP identified and quantified a set of "viable" products having agronomic capability, and market and economic potential.

The MYDP, the Yukon Cost of Production Study, and subsequent information show that realistic, economically viable opportunities exist for:

- Hay;
- Oats (greenfeed, grain and straw);
- Barley;
- Farmgate beef;
- Conventional and organic market gardening, especially root vegetables (chiefly potatoes, carrots);
- Mixed farms, which combine raising livestock with hay and/or grain operations.
- Game farming, which is likely to recover in the medium term.

Potentially viable opportunities may exist for:

- Mixed farms, which might improve returns for poultry in combination with raising feedgrains;
- Cultivated mushrooms;
- Honey, bedding plants, berries, and boreal products, which might be marketable if subsidized by “lifestyle inputs”.

Proposed Development Strategies:

In support of increasing profitability and production, this paper proposes two general strategies and one supporting strategy to create sustainable gains in the net economic impact of the sector, and in the net income of producers over a 5-year span.

Strategy 1 - Focus on greenfeeds: Increase the production, sale, and use of hay, greenfeed and feedgrains. Based on this, promote increased production and sale of farmgate beef and bison, inspected red meat marketed through stores and restaurants, and value-added red meat (jerky and related products).

Rationale and Expected Outcomes: Hay, greenfeed and feedgrains are agronomically viable in the Yukon. The Yukon market and the nearby Alaska market can absorb increased sales of competitively priced forage crops. The price to match is the Alberta price plus transport. The following effects can be expected from this strategy.

- Increased sales of these commodities in existing markets;
- Forage producers will be able to economically raise more beef and bison on the second-quality feeds that they do not market. Beef and bison are already profitably produced by these means for farmgate sales – this market can absorb more sales.
- With adequate freezer capacity, additional production of livestock can be processed into high quality, Canada inspected, “non-chemical” red meat that can be introduced to Yukon stores and restaurants. Further value-added products may be developed with adequate, cost-effective supplies of meat.
- The increased volume of livestock to be processed will strengthen the operations of whatever abattoir is found to be most suitable.
- Finally, if feedgrains can be less costly, poultry and egg production may also become more economical, further strengthening the abattoir or abattoirs.

The move from on-farm subsistence beef raising to farmgate sales, to inspected store-shelf meats is a “value-added” progression. A further step would be to transform raw beef or bison into specialty products that could be sold at a premium to tourists or to export markets. Smoked meats, hard salamis, and jerky are good examples. Jerky retails locally at \$7.00/100 grams (this equates to \$31.50/lb, and can be compared with \$3.50/lb farmgate sales). Across North America, the sales growth of jerky products has been explosive – in principle, a “clean” Yukon product could be positioned for the visitor market. Increased volume is key to creating such a product line – this can be an outcome of increased forage production.

What is needed for increased forage production:

- Accurate production and financial information to producers.
- More land in production. Planned land releases, cooperative association could reduce costs of development by providing equipment contracting on a cost-recovery basis.
- Reduced input costs of irrigation, fertilizer, equipment. Cooperative association could handle bulk purchases and cost-recovery rental of equipment.
- Marketing channels for export to Alaska. Cooperative association could act as agent and shipper.

What is needed for increased red meat production:

- Increased supply of economical forage and feed grains (see above). This is sufficient for farmgate sales of beef and bison.
- Economical transport, slaughter, inspection, processing and freezing, regular market outlets (fresh meats);
- Market research to introduce products to regular market outlets.
- Cost to client study to determine if existing abattoir is effective.

What is needed for value-added beef and bison:

- Feasibility and marketing study needed for value-added meat processing.
- Study of food safety legislation: is Canada legislation insufficient for Yukon products?
- Smoking, drying and vacuum wrapping equipment (jerky, smoked meats)
- Marketing and distribution channels

What is needed for increased poultry production:

- Economical supplies of feedgrains:
- Yukon-grown strategy, (above), or
- Cooperative bulk purchases and shipments of Alberta feedgrains.

Strategy 2 – focus on root vegetables: Increase the production and sales of potatoes and carrots - conventionally grown, and organic. Develop regular, year-round market outlets, develop value-added niches: such as organic, farm-fresh, “Yukon grown”.

Rationale and Expected Outcomes: Potatoes and carrots are proven to be effective Yukon crops. They are a logical focal point, since they are the most economically attractive crop with good profit margins and a steady and proven market. If regular year-round market outlets are obtained, Yukon farmers could aim for 100% of the local demand. If available year-round in the market, Yukon potatoes and carrots would increase local consumer awareness and loyalty with positive consequences for other seasonal and specialty products. A solid role can exist for a Co-operative to aid with reducing cost inputs, marketing and distribution, and possibly building and operating a cold storage facility.

What is needed to increase potato and carrot production:

- Accurate production and financial information to producers. (Extension services)
- Research and technical advice on organic fertilizers and pest management.
- Lower input costs: chiefly fertilizer and irrigation. Role for Cooperative in bulk purchasing and transport.
- Cold storage facility for Whitehorse market. A co-operative association could operate this on a cost-recovery basis. The Co-op could also be responsible for marketing and distribution.
- *Alternatively:* facility designs and financial support could be provided for building economical on- farm cold storage. A possible role for a Co-operative could be to handle marketing and distribution.
- Development of markets and market channels.
- Commitment by individuals to produce marketable quantities of potatoes and carrots to support and justify this strategy.

Supporting Strategy - develop agritourism: Agritourism, defined as visiting a working farm or any, horticultural or agribusiness operation for the purpose of enjoyment, education, or active involvement, has become an important income supplement to farm economies across North America, Europe, and Australia. Many provincial and state governments have drafted agritourism development strategies and plans; in some regions, agritourism is considered to be critical to farm survival. Preliminary findings of a Yukon agritourism study indicate that Yukon farms have potential to create financially attractive tourism products that complement agricultural operations. A Yukon Agritourism Development Strategy will be available in May, 2003.

Support from the Agricultural Policy Framework (APF)

The APF can direct substantial funds towards developing the Yukon agricultural sector over the next five years. If fully implemented, potential funding can be as much as \$500,000/yr, shared between Canada and YTG on a 60/40 basis. The APF can support a Yukon development strategy of increasing sustainable profitability and production through its five components:

- **Risk management.**
 - Design and implement an effective risk management program addressing both crop losses and price fluctuations. Reducing financial uncertainty is essential to enabling Yukon farms to expand.

- **Food safety and quality assurance.**
 - Determine the adequacy of Canada and Yukon legislation and regulations with respect to food safety and quality, particularly for food processing for the Yukon market. Identify need for additional legislation and regulations, and determine agency roles and responsibilities in the Yukon context.
 - Design and implement Hazard Analysis Critical Control Point (HACCP) approaches for Yukon produced consumer food products.
 - Coordinate HACCP approaches into the design of new products and new processing technologies.

- **Environment.**
 - Implement farm environmental scans
 - Institute farm development plans that minimize environmental impacts
 - Focus research efforts on soil conservation, soil building, and soil fertility
 - Focus research efforts on waste management for farms and processing facilities.
 - Complete regional and local area plans to safeguard agricultural lands and to provide effective and timely land dispositions.
 - Ensure comprehensive environmental reviews.
 - Reduce competition for agricultural lands through a rural land program that serves rural residential and tourism interests.

- **Business renewal and development.**
 - Improve financial services to farmers per MYDP suggestions
 - Support to associations and/or cooperatives, roles to investigate include marketing, distribution, at-cost services for bulk purchases of fertilizers, irrigation equipment, feed, equipment rentals, building and operating key facilities such as cold storage, or possibly a mobile abattoir.
 - Support for infrastructure – possibly through cooperatives.
 - Marketing support.
 - Provide focused extension services to producers of targeted crops and products.
 - Provide a secondary focus on extension services and research to seasonal crops and developmental products such berries, poultry, medicinal plants, domestic and wild mushrooms.
 - Provide companion program of extension and education services to gardeners and lifestyle farmers.
 - Amend agreement for sale provisions, including
 - extend agreement for sale period to seven years
 - allow grouping of development costs on additional parcels
 - allow for sale and transfer of land between existing farms.

- **Science and innovation.**
 - Continue to support a robust research and development program for new crops, new varieties, and new products including value added.
 - Provide support for new technologies, new markets, and new business or cooperative structures, new infrastructure
 - Focus research efforts on soil conservation, soil building, and soil fertility.

Roles and Responsibilities:

The Agriculture Branch should take the lead role in formulating and coordinating policy and development strategies for the sector and for the APF. It should particularly seek to explicitly coordinate an agricultural development strategy with its APF programming, with CARD, and with the Canadian Rural Partnership. Within the context of accepted Yukon Government direction, the Agriculture Branch should seek similarly explicit cooperation with Tourism Yukon, the Department of the Environment, Community Services, and Health and Social Services on complementary areas and on competing issues.

The Branch should have primary responsibility for program delivery, extension, conducting and coordinating applied field research, marketing research, and policy research.

The Branch should seek to support and strengthen industry associations such as the YAA so that they can become effective partners in delivering programs and in obtaining industry support. If these associations are not able to become reinvigorated and effective, the Branch should use APF resources to investigate and develop alternatives, such as cooperative structures.

The private sector is responsible for developing and operating farms for sustainable production of marketable commodities. If the agricultural sector fails to produce adequate volumes, it defeats the purpose of the development strategy, the APF, and indeed the Yukon's agricultural program. The private sector has additional roles:

- to actively research and implement best practices and effective operations,
- to run farms as sustainable, profitable businesses
- to ensure food quality and safety throughout the production, processing and marketing chain,
- to minimize environmental impacts.

Private sector organizations such as YAA, the Yukon Game Growers Association, and co-operatives, should any be established, should be expected to collaborate with government on designing and assisting in the delivery of programs and research, representing industry views and positions, and in promoting the interests of the industry to government and to the general public. The public and the industry has a right to expect that recognized stakeholder groups are representative, democratically run, well informed, accountable, and constructive.

Yukon Agricultural Development Strategy:
Summary of Implementation Steps

| Initial priorities: | Second stage priorities. | Third stage priorities. |
|--|--|---|
| <p>Confirm government and industry support.</p> <p>Research adequacy of legislative authorities and mandates.</p> <p>Assess how to assign YTG expenditures so to maximize federal contributions.</p> <p>Coordinate programs of YTG departments and federal agencies. Resolve overlaps and issues.</p> <p>Complete APF negotiations.</p> <p>Revise the Yukon Agriculture Policy.</p> <p>Design and deliver an integrated rural land program.</p> <p>Modify agreement for sale terms.</p> <p>Support land use planning; greater focus on agricultural potential.</p> | <p>Implement risk management programs.</p> <p>Feasibility plans and market research for increasing a) forages and feed grains, meat production; and b) potatoes and carrots.</p> <p>Cost-to-producer study comparing the existing abattoir with a possible Whitehorse area one. Feasibility study if warranted.</p> <p>Determine need for: vegetable cold storage facilities, meat storage freezers, value-added red meat processing. Feasibility studies if warranted.</p> <p>Study range of possible roles and services, and structures for a Yukon agricultural co-operative.</p> <p>With an appropriate partner, assist with providing abattoir, freezer, cold storage as suggested by studies.</p> <p>Environmental scans for existing farms.</p> | <p>Implement Strategy 1, increasing continuum of hay, feedgrains, and forage > cattle > farmgate beef > value added meat products. (Section 5.3)</p> <p>Implement Strategy 2 increasing economically viable root vegetables (potatoes and carrots) and related market gardening. (Section 5.3)</p> <p>Develop regular and year-round market outlets.</p> |

1.0 INTRODUCTION

The purpose of this project is to conduct an analysis of the Yukon agriculture industry in order to identify options, and recommend strategic directions and linkages for its development over the next 5 years.

The report will assist the Department of Energy, Mines, and Resources in making recommendations to the Minister and to the government regarding:

1. Key strategic directions for the development of the agri-food industry and the agriculture sector in the Yukon;
2. New or improved government policies and programs that may be needed to facilitate this development; and
3. Priorities for programs and projects that will assist the development of the industry over the next five years within the context of the federal-provincial-territorial Agricultural Policy Framework Agreement (APF).

Agricultural Policy Framework Agreement (APF).

In June 2001, federal, provincial, and territorial agriculture ministers agreed to develop the APF, “an architecture for agricultural policy for the 21st century. The objective is for Canada to be a world leader in food safety, innovation and environmentally responsible production.”

The purpose of the Framework Agreement is to set out a national-level, comprehensive agricultural policy framework with common goals and mechanisms for implementation. Guided by the Framework Agreement, each province and territory can negotiate implementation agreements setting out what each party will undertake and finance.

Yukon’s strategic needs.

The Yukon Government needs an overall strategy that will consider how to foster the agricultural sector, and more specifically, how to best apply the APF. The strategy must be broader than the scope of the APF agreement, including topics that bear on institutional capacities and mandates, such as:

- Revising the outdated Yukon Agricultural Policy;
- Determining whether Yukon’s legislative and policy base can sufficiently support a development strategy;
- Identifying linkages and constraints between policies, legislation, APF conditions, and development needs as identified for the Yukon.

A strategic analysis is a structured inquiry leading to a strategy: a coordinated approach to achieving identified goals and objectives – in this case for developing the Yukon’s agriculture sector. It must take into account current conditions, desired future conditions, present and future capabilities, and means. It requires a layered approach, beginning with “big picture” questions (Where do we stand now? What are we trying to accomplish?) before it addresses more detailed matters such as policies and programs (How do we do it?).

2.0 SITUATION ANALYSIS

The transfer of the Agriculture Branch from the Department of the Environment to the Department of Energy, Mines, and Resources (EMR) recognized that agriculture can offer significant economic benefits to the Yukon in addition to its obvious lifestyle values. Since the 1980's, the Yukon government has supported the development of agriculture in the Territory. For most of this period, the priority was to get suitable lands into private ownership to promote farm development and agricultural production. Although the agricultural land program is an ongoing commitment of government, in recent years production, marketing, and infrastructure have received increasing attention.

2.1 INDUSTRY OVERVIEW

The Yukon agricultural industry has been well described in the 2001 Agricultural Census and in the State of the Industry reports prepared by the Agriculture Branch. Readers should refer to these documents for details. The intent of this section is to analyze this information to estimate strategic implications.

2.1.1 Snapshot of the industry.

Since 1971, the agricultural sector has grown dramatically in the Yukon. In that year, the Census reported 12 operating farms with 2,271 acres, of which 1,418 acres were improved farmland. Total value of sales was \$18,380, and the territorial population was 18,390 (\$1.00 sales / person).

The 2001 Census reported 170 farms with 29,318 acres; 7,015 were in field crops. Total farm capital was over \$50 million - a *ten-fold* increase since 1986. The value of sales was nearly \$4.2 million in a territorial population of 30,000 (\$140 sales / person). Growth in farm acreage, farm capital and sales has steadily risen since 1996.

According to the 2001 Census, forage crops are the most important product in terms of acreage and in total values. Yukon farmers produce about 50% of the territorial requirements. The value and the numbers of livestock and game farm animals have remained static or have declined since 1996, while poultry and eggs have expanded. Niche markets appear to be developing for feed grains, farmgate beef, vegetables, bedding plants and honey. Organic vegetable production has become established, and farmers are experimenting with small fruits. A lively home and backyard gardening sector produces significant quantities of vegetables and small fruits each summer. An interesting development initiated by organic gardeners is "community-supported agriculture"(CSAs). CSAs enable a producer to sell shares in the year's harvest to consumers at the beginning of the growing season. The advance cash-flow can ease dependence on operating loans from banks.

First Nation communities are showing more interest in agriculture. The Little Salmon Carmacks First Nation is into the third season of developing a commercial-scale garden

and greenhouse. The project is providing top-quality produce as well as jobs. Community and personal well-being are an additional benefit. Elsewhere, First Nation individuals have considered opportunities to provide forage and fodder for local horses.

Relative to its potential market, Yukon agriculture is still small. Of the 170 farms, slightly over half are under 70 acres with total capital value less than \$200,000 each. Over 34% of Yukon farms grossed less than \$2500 in sales each; 29% grossed between \$2500 and \$10,000; while only 11% of farms reported gross sales over \$50,000 in 2001. For virtually every commodity, Yukon production is substantially less than the local market demand. In principle, there is ample room in the market for the industry to expand.

Overall, the Yukon farm sector operated at a net loss in 2000. Total gross farm receipts for the sector were \$4,194,864. These were exceeded by total farm operating expenses of \$4,748,443. These Census figures were obtained in an adverse year of heavy rains resulting in severe crop losses. Offsetting these operating losses are real gains in net production, and in total farm capital reported at \$50.2 million. At this stage of development it is fair to say that the industry operates at close to the breakeven point.

This is not necessarily an indictment of Yukon agriculture: nationally, it is common for farmers to rely on off-farm income. Agriculture Canada recognizes 9 categories of farms. In the Prairie provinces, “Small Farms”, “Lifestyle Farms”, and “Low Income Farms” on average have very low gross margins. On the other hand, larger commercially motivated farms have substantial gross margins. It is interesting to note that the top 20% of Canadian farms account for 73% of production. The bottom 80% of producers consider farm profitability a core issue.

Yukon farmers exhibit a similar distribution of income and profitability, with the top 23% of farms producing approximately 70% of gross receipts. It is reasonable to assume that the 53% of Yukon farms reporting gross receipts under \$5000 are lifestyle operations. This corresponds almost perfectly with the number of farms with areas of 69 acres or less. The remaining 47% may be assumed to have stronger interests and commitment to commercial production: 19 farms are producing more than \$50,000/yr in receipts – roughly corresponding to the number of farms with capital values greater than \$500,000.

Implication: there is a substantial core of Yukon farmers dedicated to commercially viable production. In principle, there is also considerable room in the market for expanded production. EMR can expect that a client base exists that will be receptive partners for serious sectoral development.

2.1.2 Land Base

Only 1.4% of the Yukon has soils and climate potentially suitable for agriculture. Of a potential agricultural landbase of 1.9 million acres, approximately 29,000 acres (1.5%) have been allocated to farms. In principle, there is considerable room for expanding agriculture in the Yukon depending on the outcome of landuse planning exercises.

Agriculturally suitable lands are often valley bottomlands that have other resource values including wildlife habitat, trapping, hunting, recreation, tourism, and residential homesites. There can be considerable competition to reserve or allocate these lands to other uses. In the past, some dispositions from the agricultural land program were made to applicants who did not have intentions to farm. From its outset, this program was an outlet for serving residential and lifestyle values. A consequence is that non-farming owners occupy some accessible farmlands.

Several land use plans have been completed at both subregional and local area scales. Accepted plans are clearly the most effective means of sorting out land use issues and allocating resources. It is not yet clear how territorial policy priorities (e.g. a commitment to furnish more farmland) can and should be expressed in a plan if local planning committees do not support allocating more land to agriculture.

Implication: Relative to the population base, there is no shortage of potential farmland to support industry expansion, but the supply of undeveloped land is constrained by competing interests and location (chiefly access). It should be noted that the availability of undeveloped farmland within commuting distance of Whitehorse is virtually nil, but there is a substantial amount of underutilized land that is already titled. The sale or lease of such land might meet part of the demand for farmland and provide a basis for real industry expansion. Demand for new farmland in outlying areas might be less intense since some applicants must rely on jobs in the Whitehorse economy. Land use planning processes for identifying and allocating farmlands will be key to expanding the quantum of developed land. As emphasized in the 1999 Yukon Agricultural Policy Evaluation, it would be helpful if the agricultural land program was complemented by a program that provided non-agricultural rural land to residential, recreational, and tourism interests.

2.1.3 Environmental Constraints and Impacts.

Agriculture faces significant environmental constraints in the Yukon, chiefly low soil fertility, risk of frost throughout the growing season, and in many areas, drought. These constraints are not insurmountable, but they cannot be ignored in a development strategy. Solutions to these problems can be costly – they include: fertilizer, greenhouses and/or field-scale frost protection, and irrigation systems.

Currently, Yukon agriculture responds to environmental constraints in these ways:

- 1,395 acres (20% of cultivated farmland) are irrigated
- 3,976 acres (57% of cultivated farmland) use commercial fertilizers
- 401 acres (5.7% of cultivated farmland) applies manure
- 53,700 square feet (1.2 acre) is under greenhouse glass.

The Yukon has incurred few of the environmental impacts that have plagued agriculture in southern Canada. On-site pollution and waste accumulation, subsurface and surface water pollution, soil erosion, and runoffs from fertilizers and pesticides are at present absent or inconsequential – for example, just 632 acres (9% of cultivated farmland) receive herbicides. The most commonly cited environmental impacts attributed to

agricultural development are conflicts with wildlife and recreation. These are more properly considered landuse impacts and they can be best dealt with through landuse planning exercises.

Implication: The Yukon has full opportunity to avoid duplicating the environmental mistakes found elsewhere. The APF emphasis on environmental farm scans is an important preventative tool. The cost of responding to environmental constraints (fertilizers, irrigation, frost protection) significantly raise the cost of production.

2.2 AGRICULTURAL POLICY FRAMEWORK AGREEMENT (APF)

The APF, a national agricultural development policy, can direct substantial funds towards the Yukon agricultural sector over the next five years. If fully implemented, potential funding can be as much as \$535,000/yr, shared between Canada and YTG on a 60/40 basis. The APF intends to foster a balanced and strategic approach to development by addressing five sectors:

1. **Risk management.** Cooperative public-private partnerships to reduce and manage risks of crop failure and price fluctuations by crop insurance and income stabilization programs. The aim is a financially sustainable program that enables farm income to become stabilized.
2. **Food safety and quality assurance.** The aim is for Canada to become a “world leader” of safe, high-quality food products. The objective is to develop verifiable food safety systems from farm level production to market-ready products.
3. **Environment.** The aim is to improve environmental performance of farms in the areas of water quality, soil health and erosion, air emissions, and biodiversity impact reduction. Assessing current conditions through farm environmental scans and development plans would be the initial focus.
4. **Business renewal and development.** The aims are to aid farmers to be more successful by adapting to change and by strengthening and improving the performance of their businesses. Areas of interest include adopting new technologies, expanding operations, changing product mixes, access to capital, and enabling new farmers to replace those wishing to exit the industry.
5. **Science and innovation.** The aim is to encourage research and development into biotechnologies (products and production), processing, environment, health sciences, and new markets to apply the resulting innovations.

A national program designed to revitalize a mature industry, the APF fits Yukon conditions imperfectly. Agriculture in the Yukon is in an early developmental stage with needs and priorities that in some cases do not match the implementation criteria of the Framework Agreement. For example, the Yukon has little of the basic infrastructure that can be taken for granted in mature farming regions. The APF does not readily support funding for so-called “bricks and mortar” infrastructure projects – precisely what may be most needed in the Yukon – but it appears likely that there will be flexibility in the

implementation agreements. Similarly, much of the programming for food safety and quality may be difficult to apply in a territory where basic production, processing, and marketing is so rudimentary that it is outside the authority of regulatory oversight. Flexibility in implementing the APF will help ensure that the APF is relevant to the Yukon.

2.3 YUKON AGRICULTURE POLICY

Adopted by the Yukon in 1991, the current Yukon Agricultural Policy states the following general goal: *“to promote a sustainable, self-sufficient (market-driven), and economically viable industry in the territory.”* The goal and its following objectives were based on principles of sustainable development and on principles stated in the Yukon Economic Strategy, the Yukon Conservation Strategy, and the *Yukon Environment Act*.

The main thrust of the 1991 Policy was to direct a land disposition program in support of commercial farm development and lifestyle farming. The Policy also addressed a suite of support services for developing an agricultural sector, including extension services, research, regional development, conservation services, marketing support, farm finance and farm management, veterinary services, public health and safety, technology transfer, and cooperative relations with Agriculture Canada.

The Yukon Agriculture Policy specified that it should be evaluated after 5 years. This was conducted in 1999 (TransNorthern Mgt. Consulting). The evaluation recommended strategic level and operational level improvements to the policy. In essence these were to:

1. Clarify goals, emphasizing fostering commercially profitable farming;
2. Specify measurable objectives and establish targets and endpoints;
3. Explicitly outline the policy strategy (the general approach for attaining stated objectives);
4. Provide operational details for the policy strategy.

The evaluation recommended options for strengthening the policy, and for improving the land program and the Grazing Policy.

The Agriculture Branch, while still in the Department of Renewable Resources, prepared a detailed response document addressing each of the recommendations. Most were accepted by an interagency committee; including the recommendation to shift public emphasis to promoting and supporting commercially viable producers. Work on redrafting the policy began, but was put on hold in 2000.

The 1991 Policy remains the document of reference for the Agriculture Branch. It establishes the Branch’s mandate to provide a range of programs and services to farmers. Among its limitations, it does not provide strategic direction for developing the sector, nor does it distinguish between lifestyle farms, hobby farms, and those committed to commercial production.

2.4 CURRENT AGRICULTURAL PROGRAMS AND INITIATIVES.

Through the Agriculture Branch, EMR undertakes a variety of programs and initiatives in support of developing the agricultural sector. They can be roughly divided into the land disposition program, extension and educational services, research and demonstration, marketing support, policy and market research, support services, and program development. See Appendix 1 for details. Implementing the APF may require additions or changes in emphasis to the range of services and programs provided by EMR.

Apart from the programs delivered by the Agriculture Branch, other programs and services are extended to the agriculture sector by the Yukon Government, Agriculture Canada and the Canadian Food Inspection Agency . These are detailed in Appendix 2.

The present suite of programs has accrued over many years and is evidence of a substantial commitment to agricultural development by the Government of Yukon and the Government of Canada. Although each initiative and program supports the agricultural sector, collectively they do not constitute an integrated multi-year strategy. Within the limits of its policy mandate, EMR's Agriculture Branch uses its staff and its resources effectively to deliver needed programs.

3.0 STRATEGIC ANALYSIS OF INDUSTRY.

3.1 MULTI-YEAR DEVELOPMENT PLAN

In 2000 the Agriculture Branch and Agriculture Canada sponsored a "Multi-Year Development Plan" (Serecon Mgt. Consulting). Industry and the Government of Yukon reviewed the Multi-Year Development Plan, but have not formally adopted it. The MYDP had the following objectives:

- Overview of the current state of the industry
- Strengths, weaknesses, opportunities, constraints for each sector
- Five-year development plan
- Performance measures and indicators for each plan component.

The MYDP determined that local market demand existed for a number of agricultural commodities that could be produced in the Yukon. From these theoretical opportunities, the plan identified and quantified a set of "viable" products. Viability was defined as products having agronomic capability, and market and economic potential. Table 1 summarizes how the MYDP viewed agricultural opportunities in the Yukon.

Table 1. Categories of Agricultural Products: Multi-Year Development Plan

| Viable with limited profit potential | Viable with good profit potential |
|--|--|
| <ul style="list-style-type: none"> ▪ Market gardening: mixed vegetables & plants ▪ Eggs ▪ Potatoes ▪ Farmgate beef ▪ Native grass seed | <ul style="list-style-type: none"> ▪ Hay ▪ Game farming: elk and reindeer breeding stock; possibly meat ▪ Elk antler velvet ▪ Greenhouse produce & flowers/bedding plants ▪ Herbs |
| Show potential, but not yet proven viable | Considered not viable |
| <ul style="list-style-type: none"> ▪ Game farming: wood bison, muskox ▪ Broilers, hatchery chicks ▪ Feed grains: barley,oats ▪ Berries, small fruit ▪ Root vegetables ▪ Organic produce ▪ Honey ▪ Boreal products: various indigenous products ▪ Various nutraceuticals | <ul style="list-style-type: none"> ▪ Dairy products ▪ Wheat, most grains ▪ Pork/hogs ▪ Sheep |

From this initial analysis, the MYDP proceeded to segment producers into full-time, aspiring full-time, and part-time or lifestyle farmers, suggesting that each segment might require somewhat different approaches. The industry development approach is summarized in Table 2:

Table 2. MYDP Agricultural Development Focus

| <i>Sector/Product</i> | <i>Producers</i> | | |
|--|------------------|--------------------|-------------|
| | Full-time | Aspiring full-time | Lifestylers |
| Hay Elk & reindeer Bison Market gardening | Primary Focus | | |
| Beef Native grass seed Berries Honey | Secondary Focus | | |
| Pork Dairy Others | Tertiary Focus | | |

The essence of the MYDP approach was to devise *Industry-wide strategies* for the fields of infrastructure, regulatory and support programs, financing, research and development, and marketing; and *Sectoral strategies* for the primary focus sectors of hay, elk & reindeer, bison, market gardening, and poultry. For each sub-strategy, specific strategy steps, role and responsibilities, resources, and timelines were identified. Many of the provisions in the MYDP Industry-wide strategies are consistent with the five strategic sectors addressed by the APF.

MYDP Industry-wide Strategies:

Infrastructure

- Facilitate development of irrigation systems
- Expedite water licenses
- Investigate low use of rural electrification program
- Consider coop for purchasing animals at farmgate for transport to abattoir and marketing the meat locally.

Public Policy

- Improve and facilitate agricultural land program for producers
- Investigate crop insurance and income stabilization programs
- Address how to ameliorate high freight costs
- Research socio-economic impacts of farming in the Yukon

Financing

- Increase farmers' awareness of Farm Credit Corporation
- Improve awareness of local banks of farm financing options
- Address ways to enable Agreements-for-Sale to serve as security for development loans
- Support for development plans, feasibility studies, marketing

Research and Development

- Applied research on production capacity
- Research environmental effects of Yukon agriculture
- Market research for local markets and export markets
- Complete a cost of production analysis focusing on viability

Marketing

- Ensure that farm business plans are market-oriented
- Encourage industry to use the Yukon Trade and Investment Fund for export assistance
- Implement Yukon Grown Marketing Strategy

Highlights of the *Sectoral strategies* for the primary focus sectors of hay, elk & reindeer, bison, market gardening, and poultry are in Appendix 3.

3.2 AGRICULTURAL COST OF PRODUCTION STUDY

The Yukon Agricultural Costs of Production Study (2002) followed up the MYDP with more detailed and timely financial projections for a variety of agricultural products. This study showed potentially attractive returns from a number of products. The potential net income figures shown below include maintenance, interest, and depreciation on land, equipment and buildings. Net cash income would be higher for long-established farms.

| Product | Potential Net income/year 5 | Total Capital Cost |
|---|---|---------------------------|
| market gardening | \$16,000 / 5 acre garden, 1500 ft ² greenhouse | \$ 75,750 |
| oats (grain, straw) | \$13,800 / 100 acres | \$162,500 |
| potatoes/carrots | \$11,806 / 10 acres | \$142,500 |
| horse boarding (20 head pastured) | (\$5,150) / 40 acres - stand alone operation. | \$ 73,000 |
| | \$15,000 - \$18,000 - companion to a hay/grain farm | |
| hay | \$15,000 / 100 acres | \$168,000 |

| | | |
|--|--|-----------|
| greenfeed oats | \$ 5,000 / 80 acres | \$128,000 |
| game farming (elk cow/calf velvet) | \$12,750 / 120 acres | \$185,500 |
| beef | \$ 708 / 80 acres, 16 head | \$123,500 |
| | \$20,000 – companion product to a hay/grain farm | |
| bedding plants | (\$1,508) 2 acre garden, 1500 ft ² greenhouse | \$ 35,200 |
| | * owner/labor = ½ of revenues | |
| barley (grain, straw) | \$23,000 / 100 acres | \$162,500 |

The 2002 study showed that the viability of products could be improved if certain constraints were removed. A key constraint is high production costs due to the costs of irrigation, feed, fertilizer, or labor. Other constraints are the lack of processing and storage facilities, and high transport costs. The lack of regular market outlets for consumer products like vegetables and meats is a further constraint.

The Study spreadsheets showed that several other products could become economical to produce if production cost constraints such as feed or labor were reduced:

- turkeys (feed cost constraint)
- layer chickens (feed cost constraint)
- broiler chickens (feed cost constraint)
- bison (feed cost constraint)
- berries (herbicides, fertilizer, labor cost constraints)

Neither the MYDP nor the Yukon Agricultural Cost of Production study investigated the improved earning potential from mixed farm operations, nor did they address supplemental earning opportunities from closely related activities such as agritourism.

Agricultural infrastructure (including access, transport, storage, processing, distribution and market outlets) is underdeveloped in the Yukon. There is considerable room – and need - for improvement if the agricultural industry is to develop to its potential. Regulatory infrastructure that enables Yukon producers to use conventional market channels is also underdeveloped.

Strategic Implications

A number of Yukon agricultural products are profitable at present. These can become more profitable, and other products can become profitable, if key constraints are overcome. It is puzzling that despite the evident profit potential, Yukon farmers are not rushing to produce potatoes and carrots, nor are they saturating the market with hay, feed grains, greenfeed, and farmgate beef. Possible constraints might include land, equipment, high production costs, sparse processing equipment, infrastructure, and marketing outlets. Information about commercial opportunities might be lacking. It might also be that some farmers simply do not have the intention to produce more or better. A Yukon agricultural development strategy must identify which constraints to productivity and profitability are most significant and devise effective ways to overcome them.

3.3 APF CONSULTATION RESULTS

Since November, 2002, the Yukon Agriculture Branch has been consulting with Yukon farmers, the YAA, Agriculture Canada, and other Yukon departments concerning the Agriculture Policy Framework agreement. There is widespread agreement that some form of business risk management program is needed for Yukon Farmers. Discussions continue whether this should be in the form of crop insurance or income stabilization.

APF consultations have been structured around the 5 APF “pillars” or program areas. The most strategic thinking has been devoted to business risk management and to identifying legislative and policy gaps, especially in the area of food safety and quality assurance. Relatively little attention has been paid to environment, or to science and innovation. Yukon farmers emphasized the need for a business risk management program, better access to capital, improved terms for the agricultural agreements for sale, and infrastructure such as storage and abattoir facilities.

4.0 POLICY AND PROGRAM LINKAGES

One way to think about linkages is to ask simply: “Who are the key players, who are the supporting players, and how do they relate to current agricultural development programs? What role might they play in a proposed strategy?”

4.1 KEY PLAYERS.

Clearly, the *key players* are EMR’s Agriculture Branch (primary responsibility for agricultural program delivery, industry development and coordination); Agriculture Canada (program delivery, funding agency, national and international liaison); Canadian Food Inspection Agency (critical inspection services), and Yukon farmers (actual producers). EMR’s Goals and objectives for Agriculture for the Year 2002 is presented in Appendix 4. Appendix 5 identifies some of the core policy platform provisions of the current government.

Effective communication and planning channels exist between these players. What is lacking for a fully effective partnership is a consciously coordinated strategy guided by a clearly articulated Agriculture Policy. The aim and the effect should be to link and leverage Agriculture Branch programs with those of Agriculture Canada. A development strategy should aim to coordinate the APF exercise with the CARD Fund and the Canadian Rural Partnership to achieve a synergistic effect. Direct links with Yukon farmers can be supplemented by support organizations such as the Yukon Agricultural Association or by creating co-operatives. Currently, the YAA is undergoing changes to respond to long-standing structural difficulties. If the YAA is to be an effective partner in developing the industry, it must become truly representative, accountable and effective. The results of recent steps to revitalize the organization will determine if it is to be a key player or a supporting player in a development strategy.

4.2 SUPPORTING PLAYERS.

The *supporting players* are the Department of the Environment (environmental reviews, land policies and land disposition programs, client services and inspections, land and resource planning support, environmental management, Game Farming Regulations); the Department of Business, Tourism and Culture (marketing and export, agritourism research and support); the Department of Community Services (land use planning); the regional land use planning commissions; affected First Nations (community land use planning, environmental reviews, possible client base); the Yukon Agricultural Association (federal program administration, industry and stakeholder representation); the Yukon Game Growers Association; the Department of Education (training trust fund); Environmental Health (food safety, on-farm water quality).

For the most part, coordination among supporting players is currently casual or informal. The Agriculture Branch, guided by a revised Policy and strategy endorsed by Cabinet, and acting in concert with Agriculture Canada through the APF can provide effective leadership and coordination to these supporting players. See Appendix 6 for summary of agricultural development issues affecting the Department of the Environment.

4.3 LEGISLATIVE AND POLICY GAPS

1. Yukon Agricultural Policy. As discussed in Section 2.3, the 1991 Yukon Agriculture Policy should be updated and strengthened.

2. Business Risk Management. The Yukon lacks a specific legislative and policy foundation for a business risk management program. It has been suggested but not demonstrated that enabling legislation should be provided for this. The need for a framework should be determined and provided if it is found to be necessary.

3. Food Safety and Food Quality.

It is unclear to what extent the Yukon requires additional or modified legislation to implement a coordinated agriculture development strategy or to implement the APF. For example, organic farmers have noted that they operate in a relative vacuum – anyone can use the label “organic” regardless of standards.

Questions persist regarding which agency addresses various environmental and food safety issues. On-farm oversight of water and air quality impacts is divided between is the responsibility of YTG Dept. of the Environment. This is also true for managing the wastes of food processors such as the abattoir. On-farm food safety matters are largely the responsibility of Agriculture Canada. On the other end of the spectrum, food safety in eating and drinking establishments and in retail sales is overseen by the Environmental Health Branch under 50-year old legislation (*Public Health and Safety Act*) and 40- year old regulations (Eating and Drinking Places Regulations, 1961).

What is unclear is the responsibility for regulating food processing, both on-farm and off-farm. The Canadian Food Inspection Agency has the mandate for providing inspection services to uphold federal legislation regarding *Yukon processors that export outside of the territory*. The regulation of processors selling only to internal markets is normally a provincial responsibility. The Yukon has no enabling legislation for this function, and it is outside the customary mandate of Agriculture Canada. See Appendix 7 for a summary of CFIA mandates and authorities.

A related issue is the adequacy of current regulations. The abattoir regulations are said to be restrictively detailed to the point where they do not allow for objective decisions. On the surface, Canadian legislation appears to offer a comprehensive set of authorities and tools to Agriculture Canada and to the Canadian Food Inspection Agency. How these authorities are applied to activities within the Yukon is not well established. One option would be to follow the provincial model and have the Yukon develop and enforce its own comprehensive legislation regarding health, food quality and food safety. Another option might be to contract these matters to the CFIA under existing federal legislation, which is likely adequate to the need. It is not clear whether the Yukon would need enabling legislation for this option.

The division of effort between the CFIA, Agriculture Canada, Agriculture Yukon, and the Yukon Environmental Health Services is not clearly delineated. It is beyond the scope of this report to make these determinations: it is sufficient to state that the adequacy of enabling legislation, regulations, and policy coordination is a persistent and serious question.

5.0 STRATEGIC DIRECTIONS FOR INDUSTRY DEVELOPMENT

5.1 MULTI-YEAR DEVELOPMENT PLAN REVISITED

The Multi-Year Development Plan, supplemented by the Yukon Cost of Production Study provides an initial framework for applying the resources of the APF to Yukon needs. The MYDP is limited in four ways:

- the information base is already dated,
- by focusing on individual products it did not consider the significant economies of mixed farming,
- it did not focus on key constraints to production and profitability, and
- its sectoral strategies were not strategically integrated and coordinated.

5.1.1 Updated information

The most significant change since the MYDP was written is the virtual collapse of the breeding stock market for elk and bison. A decline in prices was inevitable as the industry matured past its initial development phase, but this dramatic drop was precipitated by two events:

- 1) The onset of Chronic Wasting Disease (CWD) and the subsequent government-ordered slaughter of elk herds staggered the elk market.
- 2) Severe drought forced western farmers to slaughter bison which could not be fed. The subsequent auctioning off and slaughter of bison wiped out meat prices.

Both elk and bison farming can recover in time. A bridging strategy would be to redevelop a robust meat market to re-stimulate a demand for breeding stock. Elk farming can be further strengthened by continued production and sale of antler velvet. Until this happens, game farming – once the most attractive and advantageous Yukon farming opportunity – is in serious difficulty.

The Yukon Cost of Production Study updated information on cost constraints to products in the Primary focus and Secondary focus categories of the MYDP.

- Market Gardening is constrained chiefly by high labor costs, high input costs, and by depreciation on buildings and equipment.
- Beef production and horse boarding are shown to be marginal opportunities as stand-alone enterprises because of feed costs.
- Poultry (both broilers and layers) was considered to be uneconomical, constrained chiefly by the cost of feed, which amounts to between 50% and 70% of revenues.
 - It should be noted, however, that some Yukon poultry producers appear to be profitable using assumptions not considered by the Cost of Production Study.
- Honey and berries are marginal or uneconomical as commercial operations, labor costs being a significant constraint.

5.1.2 Mixed farming opportunities improve returns.

The MYDP and the Cost of Production Study analyzed products as stand-alone enterprises. The economics of several products are improved in a mixed farming analysis. In mixed-farming, both fixed and variable costs are spread between two or more products, improving the bottom line for both. Hay farming and livestock illustrate the point. On any hay farm, a certain quantity of hay is of second-quality and not marketable at an attractive price. It is nonetheless serviceable. A hay farmer who feeds second-quality hay to his or her own cattle or horses converts a revenue loss on the hay enterprise into a significant cost reduction on beef or horse boarding. The same can hold true for oats (both green feed, and grain and straw). It might also be possible that feed grain production combined with poultry raising could be economical.

In a related application of this principle, “lifestyle” operations combine personal and commercial costs and returns. A “lifestyle” operation, which would be producing in any event, subsidizes commercial production with the owner’s labor and other inputs. A different way to look at it is that owners sell a small commercial surplus and recover some expenses on a valued hobby. Either way, this principal may provide real opportunities for increasing production of honey or berries in the Yukon, if ready markets exist.

5.1.3. Agricultural development is limited by key constraints to profitability and production.

The main constraints to increasing *net earnings* for Yukon producers can be identified as follows:

- Costs of production are high, making profit margins narrow or nonexistent. These include high costs of fertilizer, irrigation, labor, equipment expense, and facilities.
- Opportunities to increase prices are sharply limited by the quality and relatively affordable prices for imported products.
- Opportunities to increase prices by product positioning (i.e. emphasizing freshness or wholesomeness) are similarly limited, as imported products are perceived to be of acceptable freshness and quality.
- Opportunities to increase prices by value-added processing *might be* limited by costs of equipment and facilities, by poor access to regular market outlets, and by insufficient volumes.
- Opportunities to increase sales are limited by poor access to regular market outlets. Regular market outlets require year-round supply of product, which is partially related to infrastructure. For root vegetables, this requires cold storage facilities; for red meat, freezer space containing sufficient volumes of an inspected product.
- Year-to-year risks from crop failure, crop losses, and price fluctuations are high, making expansions, improvements, or new initiatives difficult to justify and finance.

Constraints to increasing *net production* of the agricultural sector include:

- *Access to new agricultural land remains difficult.* The supply of new farmland in the Whitehorse area is nearly exhausted. In the rest of the Yukon, orderly and timely processing of agricultural land applications await the completion of land use plans, devolution, and in some instances, land claims settlements. In fully developed areas like the Takhini Valley, most farmers are unable to expand without the ability to purchase and transfer title to portions of adjacent farms.
- *Land and development costs are high.* The 2-for-1 development agreements work reasonably well outside of the Whitehorse area where base land prices are low. In the Whitehorse area, this provision has been a serious constraint, especially when applied to farm expansions. Many farm developers are hard-put to complete their development agreement within 5-years – they obtain title to their properties at the cost of financial exhaustion.
- *Access to capital for farm development remains difficult.* Banks are not interested in Agreements-for-sale as security instruments.
- *Production inputs are costly.*
 - Irrigation is essential to combat drought, especially in southern and central Yukon. Piping, sprinklers, and pumps are costly to import, install, and operate.
 - Fertilizer is essential to obtain acceptable yields. Virtually all is imported; transport costs are high.
 - Imported feed for livestock and poultry is expensive, either imported or purchased from local producers.
 - Labor is a high cost for operations such as greenhouses and berries.
 - Farm equipment is costly to purchase, operate, and service.
- *Cold storage facilities are needed* to enable root vegetables to be offered year round in Whitehorse area stores.
- *The Partridge Creek abattoir remains underutilized.* Some farmers maintain that an abattoir is needed in the Whitehorse area. This is debatable: more effective transport and marketing mechanisms might be in order. The fact remains that the volume of inspected meat products will have to increase before cost economies can be obtained and before stores will accept Yukon meats as regular items on their shelves.
- *Drought, frost, and harvest season rains.* Yukon's producers must expect dry planting and germination conditions, excessively wet harvest conditions especially for hay, greenfeed and grain, and the risk of killing frost at anytime.

5.1.4 Integrated strategies are needed to realize opportunities by overcoming constraints.

The 2000 Agricultural Census shows considerable development in Yukon Agriculture. The MYDP, the Yukon Cost of Production Study, and subsequent information show that realistic, economically viable opportunities exist for:

- Hay;
- Oats (greenfeed, grain and straw);

- Barley;
- Farmgate beef;
- Conventional and organic market gardening, especially root vegetables (chiefly potatoes, carrots);
- Mixed farms, which combine raising livestock with hay and/or grain operations.
- Game farming, which is likely to recover in the medium term.

Potentially viable opportunities may exist for:

- Mixed farms, which might improve returns for poultry in combination with raising feedgrains;
- Cultivated mushrooms;
- Honey, bedding plants, berries, and boreal products, which might be marketable if subsidized by “lifestyle inputs”.

Constraints to further agricultural development are serious. They can be distilled into constraints to *profitability* and constraints to *production*. The two are entwined, and strategies that focus on specific product lines are likely to fall short of their objectives.

The relationship between profitability and production has the characteristic of a vicious circle, which should be presented. Agricultural profitability can be increased in three ways:

1. *Increase volume of units sold.*
 - Develop regular market outlets, especially volume sales to stores, restaurants, and other markets. This requires sufficient year-round volumes of inspected or graded products. Further needs are infrastructure including processing facilities, and the ability to store seasonal products year-round.
2. *Increase price of units sold.*
 - Improve product quality through better practices, by inspection and grading; and create value-added products through processing. This requires sufficient volume to justify added expenses.
3. *Decrease costs.*
 - Reduce costs of inputs through mixed operations and by creating cooperative approaches to bulk purchases and transport. This requires sufficient volumes to justify added organizational structures and overhead.

Each example identifies increased production as a key to increasing profitability. The reverse relationship also occurs. Improved profitability is necessary to increasing production: it is difficult to invest in the infrastructure, added capacity, new equipment, and new approaches needed for increased production on the strength of low or marginal profits. Thus the vicious circle – it is hard to increase profitability without increased production; it is hard to increase production with low profitability.

An updated development strategy for Yukon agriculture that takes full and effective advantage of APF opportunities must break the vicious circles created by constraints to increased profits and production.

5.2 STRUCTURE FOR AN AGRICULTURAL DEVELOPMENT STRATEGY

This agricultural development strategy is built on five layers:

1. *Overall policy goal* stating in clear terms what the government intends to accomplish in developing agriculture.
2. *Strategic objectives* that support the overall policy goal.

The *strategy* includes a coordinated approach to achieving these objectives, involving:

3. *Programs* that support strategic objectives.
4. *Tactical or management objectives* that support specific programs.
5. *Linkages to other programs and services* that contribute to achieving these objectives.

The opportunities and requirements of the APF will be factored into the overall strategy.

5.2.1 Overall goal for Yukon agricultural development strategy.

The 1991 Yukon Agriculture Policy stated the following general goal: “*to promote a sustainable, self-sufficient (market-driven), and economically viable industry in the territory.*” This is not specific enough for a development strategy. It does not state in measurable terms: What do we want to accomplish? This analysis restates the goal in light of currently accepted policies, the platform of the Yukon Government, the aims of the APF, and the ambitions of Yukon farmers.

“To develop an agricultural sector in the Yukon that contributes financial benefits and stability to the Yukon economy, is profitable to producers, is environmentally sustainable, and enjoys broad social support.”

This goal statement explicitly recognizes that agriculture should be a net contributor to the economy; it identifies profitability as fundamental to the sector; and it acknowledges that its future growth will depend on its “social license” as a land use, which is linked to its environmental sustainability. Measures can be applied to each term.

5.2.2 Strategic Objectives for the Development Strategy.

Six strategic objectives are proposed to support the goal statement for agricultural development in the Yukon.

1. Increase *sustainable* profitability.

Rationale: This is the key objective, the foundation for economic sustainability. If farms are not profitable over the long term, there will be only hobby production, which is no basis for an economic sector. The Agriculture Branch should continue to serve lifestyle and part-time farms, but the core development strategy and programs should foster commercially profitable farming.

2. Increase the volume of production.

Rationale: This relates directly to improving economic significance and profitability by producing economies of scale, enabling greater market penetration, and increasing net earnings for the sector and for individual farmers. Production can be expanded in two ways – by increasing yields on currently used farmland, and by increasing the net amount of farmland in use.

3. Maintain and improve soil productivity.

Rationale: This is the basis for sustained production. Improved soil productivity (soil health, reduced erosion) supports improved profitability, increased production, as well as economic and environmental sustainability.

4. Maintain the agricultural landbase.

Rationale: Agroclimatically suitable soil groups are limited in the Yukon. The potential to produce on developed agricultural lands should not be lost. Undeveloped agricultural lands are the reservoir for expanding the capacity of the industry. Their potential should be preserved.

5. Minimize adverse environmental impacts.

Rationale: Minimal environmental impacts are an indicator of sustainability and are key to sustaining social support. In general, the Yukon's task is more to avoid causing impacts than to correct existing problems. Maintaining soils, air, water, wildlife and biodiversity, and related resource values are the chief concerns.

6. Minimize social conflicts over lands and resources.

Rationale: Broad support based on understanding and embracing the benefits of agriculture is the basis for the industry's "social license" to expand into new areas. Minimizing resource conflicts and competition is crucial.

5.2.3 General Approach for the Development Strategy

Farm profitability is the key objective in this development strategy. This does not imply that the other objectives are unimportant, but it remains that *profitability is essential*: fail to achieve this and the overall strategy fails. Increased production is the essential means to increased profitability.

Practical and measurable, these objectives, and an approach founded on increasing sustainable profitability and production is in accord with senior national policies on Sustainable Development. It agrees with the aims of the Agriculture Policy Framework, and with Yukon policies such as the Conservation Strategy and the Agriculture Policy.

This approach also agrees with the published platform of the current Yukon Government, which shows a strong commitment to sustainable responsible economic growth as the focus of government. Highlights of the current government's published platform statements are in Appendix 5.

Yukon Government ministers have indicated that the economy must rest on a partnership between government and a strong, self-sustaining private sector. The role of government is to provide leadership and a suite of policies and programs. The role for the agricultural sector is to demonstrate that it has valid economic opportunities, and the commitment to be a sustainable player in the economy. Investment and production will be the surest tests of the sector's commitment. The government shows little interest in providing substantive programming to subsidize a marginal sector.

5.3 GENERAL DEVELOPMENT STRATEGY FOR YUKON AGRICULTURE

The analysis of opportunities and constraints for Yukon agriculture reveals several conundrums or vicious circles. One example will illustrate this: increased profits for vegetable producers, requires increased production and sales through regular, year-round market outlets. This requires cold storage and distribution to enable a year-round supply, which must in turn be justified and supported by increased production and profits.

The key to breaking a vicious circle is to find a critical entry point that if solved, will have a chain of positive consequences. Typically, supporting strategies are also required. In support of increasing profitability and production, two general strategies are proposed. These are intended to create sustainable gains in the net economic effect of the sector, and in the net income of producers over a 5-year span.

- **Strategy 1 - Focus on greenfeeds:** improve production of economically viable hay, feedgrains, and forage, leading to increases in cattle and bison, farmgate meat, and value added meat products.
- **Strategy 2 - focus on root vegetables:** improve production of economically viable root vegetables (potatoes and carrots) and related market gardening.

Strategy 1 entry point: Increase the production, sale, and use of hay, greenfeed and feedgrains. Based on this, promote increased production and sale of farmgate beef and bison, inspected red meat marketed through stores and restaurants, and value-added red meat (jerky and related products).

Rationale and Expected Outcomes: Hay, greenfeed and feedgrains are agronomically viable in the Yukon. The Yukon market and the nearby Alaska market can absorb increased sales of competitively priced forage crops. The price to match is the Alberta price plus transport. The following effects can be expected from this strategy.

- Increased sales of these commodities in existing markets;
- Forage producers will be able to economically raise more beef and bison on the second-quality feeds that they do not market. Beef and bison are already profitably produced by these means for farmgate sales – this market can absorb more sales.

- With adequate freezer capacity, additional production of livestock can be processed into high quality, Canada inspected, “non-chemical” red meat that can be introduced to Yukon stores and restaurants. Further value-added products might be developed with adequate, cost-effective supplies of red meat.
- The increased volume of livestock to be processed will strengthen the operations of whatever abattoir is found to be most suitable.
- Finally, if feedgrains can be less costly, poultry and egg production may also become more economical, further strengthening the abattoir or abattoirs.

Note on Value-added products.

The move from on-farm subsistence beef raising to farmgate sales, to inspected store-shelf meats is a “value-added” progression. A further step would be to transform raw beef or bison into specialty products that could be sold at a premium to tourists or to export markets. Smoked meats, hard salamis, and jerky are good examples. Jerky retails locally for as much as \$7.00/100 grams (this equates to \$31.50/lb, and requires about 4 lbs or \$15.00 of meat valued at \$3.50/lb farmgate sales). Across North America, the sales growth of jerky products has been explosive – in principle, a “clean” Yukon product could be positioned for the visitor market. Increased volume is key to creating such a product line – this can be an outcome of increased forage production.

Elsewhere in North America, growers of organic and specialty goods have transformed basic commodities (such as fruits, nuts, hams) into high-priced, name-brand, specialty products that are retailed direct to consumers via catalogs, Internet, and boutique stores. Vermont is a good example, leading the U.S. in development of specialty products. In the past 15 years the number of companies has blossomed from seven to 200. From Ben and Jerry's ice cream to maple syrup, specialty cheeses, and value added lamb products, Vermont agriculturists create successful niche markets to save its agricultural production.

What is needed for increased production of hay, greenfeed, and grains:

- Accurate production and financial information to producers.
- More land in production. Planned land releases, cooperative association could reduce costs of development by providing equipment contracting on a cost-recovery basis.
- Reduced input costs of irrigation, fertilizer, equipment. Cooperative association could handle bulk purchases and cost-recovery rental of equipment.
- Marketing channels for export to Alaska. Cooperative association could act as agent and shipper.

What is needed for increased red meat production:

- Increased supply of economical forage and feed grains (see above). This is sufficient for farmgate sales of beef and bison.
- Economical transport, slaughter, inspection, processing and freezing, regular market outlets (fresh meats);
- Market research to introduce products to regular market outlets.
- Cost to client study to determine if existing abattoir is effective.

What is needed for value-added beef and bison:

- Feasibility and marketing study needed for value-added meat processing.
- Study of food safety legislation: is Canada legislation insufficient for Yukon products?
- Smoking, drying and vacuum wrapping equipment (jerky, smoked meats)
- Marketing and distribution channels

What is needed for increased poultry production:

- Economical supplies of feedgrains:
 - o Yukon-grown, (see above), or
 - o Cooperative bulk purchases and shipments of Alberta feedgrains.

Strategy 2, focus on root vegetables: Increase the production and sales of potatoes and carrots - conventionally grown, and organic. Develop regular, year-round market outlets, develop value-added niches: such as organic, farm-fresh, "Yukon grown".

Rationale and Expected Outcomes: Potatoes and carrots are proven to be effective Yukon crops. They are a logical focal point, since they are the most economically attractive crop with a good profit margin and a steady and proven market. If regular year-round market outlets are obtained, Yukon farmers could aim for 100% of the local demand. If available year-round in the market, Yukon potatoes and carrots would increase local consumer awareness and loyalty with positive consequences for other seasonal and specialty products. A solid role can exist for a Co-operative to aid with reducing cost inputs, marketing and distribution, and possibly building and operating a cold storage facility.

What is needed to increase potato and carrot production:

- Accurate production and financial information to producers. (Extension services)
- Research and technical advice on organic fertilizers and pest management.
- More economical input costs: chiefly fertilizer and irrigation. Role for Co-Operative in bulk purchasing and transport, see above.
- Cold storage facility for Whitehorse market. This could be operated by a co-operative association on a cost-recovery basis. The Co-op could also be responsible for marketing and distribution.
- *Alternatively:* facility designs and financial support could be provided for building economical on- farm cold storage. A possible role for a Co-operative could be to handle marketing and distribution.
- Development of markets and market channels.
- Firm commitment by individuals to produce marketable quantities of potatoes and carrots to support and justify this strategy.
-

Supporting Strategy - develop agritourism: Agritourism, defined as visiting a working farm or any, horticultural or agribusiness operation for the purpose of enjoyment, education, or active involvement, has become an important income supplement to farm economies across North America, Europe, and Australia. Many provincial and state governments have drafted agritourism development strategies and plans; in some regions, agritourism is considered to be critical to farm survival. Preliminary findings of a Yukon agritourism study indicate that Yukon farms have potential to create financially attractive tourism products that complement agricultural operations. A Yukon Agritourism Development Strategy will be available in May, 2003.

5.4 APF SUPPORT TO THE DEVELOPMENT STRATEGY

The five components of the Agricultural Policy Framework can support the general development strategy of increasing sustainable profitability and production.

- **Risk management.**
 - Design and implement an effective risk management program (crop insurance, income stabilization) addressing both crop losses and price fluctuations. Reducing financial uncertainty is essential to enabling Yukon farms to expand.

- **Food safety and quality assurance.**
 - Determine adequacy of Canada and Yukon legislation and regulations with respect to food safety and quality, particularly for food processing for the Yukon market. Determine agency roles and responsibilities.
 - Design and implement Hazard Analysis Critical Control Point (HACCP) approaches for Yukon produced consumer food products.
 - Coordinate HACCP approaches into the design of new products and new processing technologies.

- **Environment.**
 - Implement farm environmental scans
 - Institute farm development plans that minimize environmental impacts
 - Focus research efforts on soil conservation, soil building, and soil fertility
 - Focus research efforts on waste management for farms and processing facilities.
 - Complete regional and local area plans to safeguard agricultural lands and to provide effective and timely land dispositions.
 - Ensure comprehensive environmental reviews.
 - Reduce competition for agricultural lands through a rural land program that serves rural residential and tourism interests.

- **Business renewal and development.**
 - Improve financial services to farmers per MYDP suggestions
 - Support to associations and/or cooperatives, roles to investigate include marketing, distribution, at-cost services for bulk purchases of fertilizers, irrigation equipment, feed, equipment rentals, building and operating key facilities such as cold storage, or possibly a mobile abattoir.
 - Support for infrastructure – possibly through cooperatives.
 - Marketing support.
 - Provide focused extension services to producers of targeted crops and products.
 - Provide a secondary focus on extension services and research to seasonal crops and developmental products such berries, poultry, medicinal and health products, wild and domestic mushrooms.
 - Provide companion program of extension and education services to gardeners and lifestyle farmers.
 - Amend agreement for sale provisions, including
 - extend agreement for sale period to seven years
 - allow grouping of development costs on additional parcels
 - allow for sale and transfer of land between existing farms.

- **Science and innovation.**
 - Continue to support a robust research and development program for new crops, new varieties, new products including value added.
 - Provide support for new technologies, new markets, and new business or cooperative structures, new infrastructure
 - Focus research efforts on soil conservation, soil building, and soil fertility.

6.0 STRATEGIC PRIORITIES FOR GOVERNMENT

6.1 ROLES AND RESPONSIBILITIES

6.1.1 Government Role

The Agriculture Branch should take lead role in formulating and coordinating policy and development strategies for the sector and for the APF. It should particularly seek to explicitly coordinate an agricultural development strategy with its APF programming, with CARD, and with the Canadian Rural Partnership. Within the context of accepted Yukon Government direction, the Agriculture Branch should seek similarly explicit cooperation with Tourism Yukon, the Department of the Environment, and Community Services (land use planning) on complementary areas and on competing issues.

The Branch should have primary responsibility for program delivery, extension, conducting and coordinating applied field research, marketing research, and policy research.

The Branch should seek to support and strengthen the YAA so that it can become an effective partner in delivering programs and in obtaining industry support. If YAA is not able to become reinvigorated, the Branch should use APF resources to investigate and develop alternatives, especially cooperative structures.

The respective roles of Agriculture Canada, the Canadian Food Inspection Agency, the Environmental Health Service, and Agriculture Yukon should be clarified, particularly in the area of regulating processing for Yukon markets. The Justice Department will likely need to assist in establishing the adequacy or gaps of existing legislation and authorities.

6.1.2 Private Sector Role

First and foremost, the private sector is responsible for developing and operating farms for sustainable production of marketable commodities. If the agricultural sector fails to produce adequate volumes, it defeats the purpose of the development strategy, the APF, and indeed the Yukon's agricultural program. The private sector has additional roles:

- to actively research and implement best practices and effective operations,
- to run farms as sustainable, profitable businesses
- to ensure food quality and safety throughout the production, processing and marketing chain,
- to minimize environmental impacts.

Private sector organizations such as YAA, the Yukon Game Growers Association, and co-operatives, should any be established, should be expected to collaborate with government on designing and assisting in the delivery of programs and research, representing industry views and positions, and in promoting the interests of the industry to government and to the general public. The public and the industry has a right to expect that recognized stakeholder groups are representative, democratically run, well informed, accountable, and constructive.

6.2 PRIORITY STEPS FOR GOVERNMENT.

Initial priorities:

- Confirm support of government and industry in the development strategy and the APF.
- Research and confirm the adequacy of legislative authorities and mandates to deliver APF and related programs. Furnish authorities as needed. This should be a cost attributed to the APF.
- Thoroughly assess which YTG expenditures can be legitimately applied to the APF funding formula with the purpose of maximizing federal contributions.
- On the basis of an overall development strategy, ensure close cooperation and compatibility between the programs and aims of all affected YTG departments and federal agencies including CARD and the Canadian Rural Partnership. Resolve interdepartmental issues and overlaps.
- Complete negotiations for Canada – Yukon Implementation Agreement related to the APF.
- Revise the Yukon Agriculture Policy to confirm government intentions to foster a commercially viable and economically significant agricultural sector.
- Design an integrated rural land program to facilitate agricultural expansion while safeguarding the agricultural land base from non-agricultural uses.
- Modify agreement for sale terms to permit longer development period.
- Support and facilitate land use planning, placing priority on identifying areas with agricultural potential. Ensure that wildlife, habitat, and other resource interests are effectively and fairly considered.

Second stage priorities.

- Design and implement business risk management programs (crop insurance and income stabilization).
- Prepare full feasibility plans and market research to the objectives of increasing
 - a) forages and feed grains, leading to increased meat production; and
 - b) potatoes and carrots.
- Prepare a cost-to-producer study comparing the existing abattoir with a possible Whitehorse area one. If warranted, continue with a feasibility study for a southern Yukon abattoir.

- Determine need for vegetable cold storage facilities (centralized and on-farm facilities), for meat storage freezers, for value-added red meat processing. Prepare feasibility studies for these facilities if warranted.
- Identify full range of possible roles and services, and organizational structures for a Yukon co-operative that would provide such services as bulk purchases, transport, distribution, processing and marketing of products.
- Using a farmer co-operative or some alternative structure, assist with providing abattoir, freezer, cold storage as suggested by studies.
- Design and implement environmental scans for existing farms.

Third stage priorities.

- Implement **Strategy 1**, focusing on the economically viable product continuum of hay, feedgrains, and forage > cattle > farmgate beef > value added meat products. (Section 5.3)
- Implement **Strategy 2** focusing on the product class of economically viable root vegetables (potatoes and carrots) and related market gardening. (Section 5.3)
- Regular, year-round market outlets should be developed for both classes of products.

APPENDICES.

Appendix 1. Agriculture Branch Programs

Through the Agriculture Branch, EMR undertakes a variety of programs and initiatives in support of developing the agricultural sector. They can be roughly divided into the land disposition program, extension and educational services, research and demonstration, marketing support, policy and market research, support services, and program development. Implementing the APF may require additions or changes in emphasis to the range of services and programs currently offered.

Agricultural Land Program activities and services:

The Agriculture Branch coordinates applications for agricultural land dispositions and grazing leases. It also provides soil suitability assessments and participates in environmental and land use review committees. The historic focus has been on “spot” agricultural land dispositions, but the policy and program intent is to shift to planned land releases resulting from regional and local land use plans.

Grazing Program activities and services:

Guided by the Grazing Policy, the Branch assesses grazing potential and prepares grazing management plans for leases. It contributes to environmental and land use review committees, and it provides subsequent oversight of approved leases.

Extension services and visits:

Providing consultation services and visits to farm clients is a core program. Topics include how to improve production, operations, administration, and finance. Testing of feeds, soil, and water are popular services. Education services include a public research and reference library, a quarterly newsletter, and seminars and symposia.

Meat Inspection services:

The Branch coordinates meat inspection services for the abattoir at the Partridge Creek farm.

Field Research and Demonstration projects:

The Branch emphasis is on applied field research relevant to Yukon clients. This includes testing of recognized northern varieties, demonstration trials, and research into soil development and conservation techniques. Research occurs on the Forestry Farm Demonstration Plot, and on cooperating private farms. This is a critically important function for long-run development of the sector.

Marketing support: The Branch supports Farmers Markets and fairs in Whitehorse and in Dawson City to provide seasonal outlets for Yukon produce and to raise public awareness of Yukon products.

Farm statistics and database: With the Bureau of Statistics and with Agriculture Canada, the Branch maintains data bases on a variety of farm statistics. This supports the Agriculture Census and establishes the performance of the land program and the industry as a whole. These databases are fundamental to evaluating policy performance and to setting strategic direction.

Research:

The Branch provides or contributes to policy and to applied research, including socio-economic analyses, legislative research, policy development, operations and cost of production research, and marketing research. Examples of necessary applied research include the Multi-Year Development Plan and the Agricultural Cost of Production Study.

New program development:

Although it lacks a fully formed development strategy, the Branch has identified critical needs and has undertaken to meet them with new programs. Farm risk management and income stabilization has been a critical area in which the Branch has provided leadership. These initiatives are further addressed in the APF.

Community support and outreach:

The Branch extends support and services to the broader community in several ways. It collaborates with the Yukon Agricultural Association and with 4-H. It works with Agriculture Planning and Advisory Committee (APAC), a Yukon Government and industry advisory group. It carries out consultation with industry and other stakeholders on agriculture issues in the Yukon. The Branch hosts the annual North of 60⁰ Agriculture Conference, and it helps to plan and participates in the Circumpolar Agriculture Conference. The Branch also conducts agricultural industry awareness campaigns, and it provides a popular Master Gardener course.

Appendix 2: Complementary Programs

Besides the APF and the programs delivered by the Agriculture Branch, other programs are extended to the agriculture sector.

- EMR's Lands Branch administers land disposition programs on Commissioner's Lands for the Yukon Government. After April, 2003, this branch will administer land disposition and lease programs on Yukon Crown Lands as well. Devolution will include the transfer of all existing programs, including the current program that receives spot applications for residential and tourism uses on federal lands. This new responsibility could provide an avenue for coordinating a "rural land program" that does not channel all rural land interests into the agricultural land program.
- Provided by Agriculture Canada and administered by the Yukon Agriculture Association, the Canadian Adaptation and Rural Development Fund (CARD), offers \$498,816 to support projects over a four-year period. Program areas: innovation, market opportunities, environmental sustainability, food safety and quality, rural development, and human capacity.
- Rural Secretariat (Agriculture Canada) administers the Canadian Rural Partnership (CRP). It has five program areas:
 - *Partnerships*: to foster improved coordination among federal, territorial, municipal and First Nation governments to build stronger rural communities.
 - *Rural Dialogue*: To better understand rural and local issues in federal programming.
 - *Rural Lens*: To foster greater inclusion of rural interests in federal decision-making and better access to programming for rural people.
 - *Information outreach*: Information to rural people about federal programs through mass media, Internet and other access points.
 - *Pilot Projects*: Works through local rural community groups. Several have been completed in the Yukon.
- Market and Industry Services Branch (Dept. Business, Tourism & Culture) helps to enhance the Yukon agri-food's share of domestic and international markets.
- Yukon Agritourism Strategy Development Study, sponsored by DIAND's Innovations Program, will study opportunities for Yukon farmers to enhance incomes by developing tourism products that complement farm operations. Marketing will emphasize use of the Yukon high-speed internet cable.

Appendix 3. Yukon Agriculture Multi-Year Development Plan Sectoral Strategies

For Yukon Government, Agriculture Canada by Serecon Mgt. Consulting, 2000.

Hay

- Increase hay and forage production with use of irrigation
- Promote Yukon grown hay to outfitters and to Alaska
- Research programs on ways to reduce input costs (e.g. legumes for nitrogen fixation, drought tolerant varieties)

Elk and Reindeer

- Increase supply of forages
- Foster expertise of local veterinarians on game farm animal health and artificial insemination
- Feasibility study on a small antler velvet processing facility in the Yukon
- Marketing plan for elk breeding stock
- Marketing plan for elk antler velvet
- Investigate establishing hunting reserves in Yukon using game farm stock

Bison

- Investigate having Wood Bison removed from list of Threatened Species
- Educational seminars and training for producers
- Promote information sharing regarding operations and marketing
- Promote bison as an alternative livestock to producers.

Market Gardening / Greenhouses

- Investigate community kitchen for processing fruits and vegetables
- Find a permanent location for the Farmer's Market
- Determine availability of storage for fresh produce and for winter storage of potatoes and carrots
- Secure institutional markets for Yukon vegetables

Poultry Production

- Secure institutional markets for Yukon poultry
- Increase retail market share
- Lower feed costs to producers by using transport cooperatives
- Assist farmers with feed freight costs

Appendix 4. EMR Goals, and Objectives circa 2002.

In its Accountability Plan for the fiscal year 2002, EMR set out the following goals, objectives, and strategies pertaining to its agricultural mandate. These goals are now subject to review and change. The new goals for EMR are still being finalized and are not yet available as of the publication of this report.

GOAL 1:

Manage Yukon's natural resources in an effective, integrated and responsible manner.

Objective 1.2:

Provide Yukon perspectives on natural resource legislation, management, administration and programs to Canada.

Strategies:

Provide technical expertise, participate on working groups and committees, convene bilateral and multi-agency meetings, and undertake technical and strategic analysis.

Bearing on Agricultural Mandate:

This provides clear direction-in-principle that EMR can engage with Canada in multi-party agreements and programs in support of agriculture and other resource sectors.

GOAL 2:

Facilitate sustained economic opportunities for Yukoners from the development of Yukon's natural resources.

Objective 2.5:

Increase productivity of Yukon's existing agricultural land base.

Strategies:

- Improve agricultural extension services by providing enhanced seminars and conferences and by making more farm visits
- Complete cost of production food study in order to identify sectoral opportunities.

Bearing on Agricultural Mandate:

The two strategies partially address the core of a broader agricultural development strategy: to increase productivity through extension services, and to increase farm profitability.

GOAL 3:

Provide integrated policy, planning and coordination functions in support of responsible natural resource management and development.

Objective 3.1:

Develop an effective and progressive natural resource management regime with First Nations and other partners.

Strategies:

- Contribute to identification of representative areas for the Yukon Protected Areas Strategy.
- Assist with completion of Development Assessment Process legislation

Bearing on Agricultural Mandate:

Both strategies bear on how agricultural lands in the public domain can be identified, reserved for agricultural purposes, and disposed to develop new farms. Essential to this is providing clear information to landscape-level allocations of lands as well as localized information to environmental assessment processes.

Objective 3.6

Co-ordinate the Government of Yukon's input and response on proposed planning boundaries, priorities for planning regions and development of terms of reference for Regional Land Use Planning Commissions.

Strategies:

- Lead the Government of Yukon's review of draft plans, public consultation documents and other products produced by Regional Planning Commissions
- Provide technical support to Regional Planning commissions.

Bearing on Agricultural Mandate:

Regional Land Use Planning is likely to be the most effective and reliable means for reserving suitable lands for agricultural development and for supporting an effective land disposition program.

GOAL 4:

Thoroughly prepare for a smooth transition of minerals, forestry and Crown land management responsibilities to Energy, Mines and Resources.

Objective 4.1:

Facilitate adaptation of federal resource management policies, procedures and administrative systems into Energy, Mines and Resources.

Strategies:

- Complete required policy, systems and legislative reviews for natural resource sectors prior to April 2003.
- Integrate public delivery of land administration processes by April 2003 to reflect parallel use of federal and territorial lands legislation.

Bearing on Agricultural Mandate:

Providing an effective legislative and administrative basis for land and resource management is essential for delivering a smoothly functioning agricultural land disposition program. Also important is to design and deliver land programs for other rural land interests that complement, rather than compete with the agricultural land program.

Objective 4.2:

Streamline access to program and regulatory information for Yukon's land and natural resources.

Strategies:

- Design and establish "one-window" access for Commissioner's land-based transactions including agricultural land.
- Develop a client portal/office for program information and regulatory requirements pertaining to lands, forestry, minerals, oil, gas and agriculture by April, 2003.

Bearing on Agricultural Mandate:

Providing a timely and effective land disposition program will enable the agricultural sector to expand. This, and an effective rural land program will significantly relieve the public pressure that has focused on the Agriculture Branch and on the Lands Disposition Program for the past decade.

Appendix 5. Yukon Party Platform relating to agriculture.

- Utilize government budgets and policies to restore investor confidence and create a responsible, sustainable economy...
- Work with industry to enhance marketing, infrastructure and product quality...
- Focus funding on initiatives designed to improve marketing and product development that will provide long-term benefit to the Yukon economy...
- Focus Economic Development funding on initiatives designed to provide long-term benefits to the Yukon economy...
- Reinststate a public-private sector working group to identify capital projects and other initiatives to promote short-term, mid-term and long-term employment opportunities...
- Streamline the agricultural land application process and make more agricultural land available to Yukon farmers...
- Safeguard agricultural land from conflicting uses and provide a seven-year term for the development of agricultural land, subject to the applicant meeting performance requirements...

Appendix 6. Department of the Environment wildlife issues.

The **Department of the Environment** is affected by an agriculture development strategy in three main ways:

- 1. Disease transmission from domestic livestock (mainly sheep) to wildlife.** The current approach is for Environment to intervene at the land application stage if there is a wildlife concern. They have little or no influence on the introduction of domestic sheep (a known disease vector) on already titled land. The Wildlife Act provides no regulatory tools, neither is there a requirement for Agriculture Canada or Agriculture Yukon to guarantee the health of sheep brought into the Yukon.
- 2. Alienation of riparian habitat.** Suitable farmland is most often found in riparian zones – also important as wildlife habitat. Spot land applications have incrementally affected wildlife interests – from Environment’s view, the best approach is to balance wildlife and agriculture interests through landscape-level landuse planning. Selection of representative areas for the Yukon Protected Areas Strategy may conflict with agricultural interests in some riparian areas.
- 3. Game Farming regulations.** Currently, game farming is regulated under the Wildlife Act. The Yukon Game Growers Association would prefer that elk, bison, dall sheep and any privately owned animal be considered to be domestic stock and governed by agricultural regulations.

Appendix 7. Canadian Food Inspection Agency

The Canadian Food Inspection Agency (CFIA) administers several acts that bear upon the agriculture and agrifood industry in the Yukon. These include:

Canada Agricultural Products Act

- Dairy Products Regulations
- Egg Regulations
- Fresh Fruit and Vegetable Regulations
- Honey Regulations
- Licensing and Arbitration Regulations
- Livestock and Poultry Carcass Grading Regulations
- Processed Egg Regulations
- Processed Products Regulations

Canadian Food Inspection Agency Act

Consumer Packaging and Labelling Act (as it relates to food)

- Consumer Packaging and Labelling Regulations

Feeds Act: Feeds Regulations, 1983

Fertilizers Act: Fertilizers Regulations

Fish Inspection Act: Fish Inspection Regulations

Food and Drugs Act (as it relates to food)

- Food and Drug Regulations

Health of Animals Act

- Export Inspection & Certification Exemption Regulations
- Health of Animals Regulations - Import Reference Document
- Honeybee Prohibition Regulations, 1999
- Compensation for Destroyed Animals
- Reportable Diseases Regulations

Meat Inspection Act: Meat Inspection Regulations, 1990

Plant Breeders' Rights Act: Plant Breeders' Rights Regulations

Plant Protection Act

Seeds Act

- Seeds Regulations
- Tables of Grade Standards
- Weed Seeds Order, 1986

In the Yukon, the Canadian Food Inspection Agency provides inspection for the federally registered egg grading station and the fish processing plant. In addition, CFIA provides inspection under the Food and Drugs Act at Yukon food processors for products including smoked salmon, bottled water, and beer. CFIA also inspects processed products not specifically cited in federal legislation. The Dawson Creek office tests livestock entering the Yukon, and retail grocery stores are inspected intermittently to see that products were labeled accurately.