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Agriculture Policy Evaluation

**Final Report
Phase 2**

Prepared for:
the Department of Renewable Resources,
Yukon Government

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Executive Summary

As stated in the Terms of Reference, "The purpose of the evaluation is to assess the effectiveness of the Agriculture Branch's programs in meeting the objectives of the Agriculture Policy. The evaluation will provide an objective measurement of policy implementation since 1991 and the basis to determine whether the policy needs to be revised. This evaluation also includes an assessment of the effectiveness of the Grazing Policy which was established in 1987." The Grazing Policy evaluation is presented in a companion document ("Yukon Grazing Policy Evaluation").

Agriculture for the 90's: A Yukon Policy was approved in November 1991, having been informally adopted in February of 1990. This policy was a deliberate attempt to rationalize the Yukon Government's efforts to facilitate agricultural development. Through the 1980's these efforts focused on getting land into private ownership based on the assumption that agricultural production would naturally follow. The results were controversial and problematic. Issues focused on the agricultural land disposition program and the effects of land development on other resources. The 1990 Agriculture Policy intended to contribute design and direction to what had been a haphazard unfolding of development.

The Agriculture Policy is broken into two sections. Section 1 is concerned with programs delivered by the Agriculture Branch, while Section 2 is concerned with a process for delivering suitable public land into private hands for agricultural development.

The evaluation has been conducted in two phases. Phase 1, completed in February 1997, examined Section 1 of the Agriculture Policy. An internal assessment of how well the Agriculture Branch has been delivering its programs, it was written by the Department of Renewable Resources, with the assistance of a Working Group drawn from the Agriculture, Policy & Planning, and Finance & Administration branches, and the Department of Economic Development.

Phase 2, the subject of this report, is meant to be a comprehensive evaluation of all components outlined in the Agriculture Policy, essentially attempting to answer whether the Policy is effective. It considers whether the programs of the policy have adequately supported the policy objectives; *and* it considers the appropriateness of the policy objectives themselves. Since the Phase 1 report addressed Section 1 of the Policy, Phase 2 was instructed to focus particularly on Section 2, while seeking stakeholder views on how well the Agriculture Branch delivers its programs under Section 1.

The Phase 2 Evaluation received initial orientation and assistance from a Working Group composed of personnel drawn from of the Agriculture Branch, the Fish and Wildlife Branch, Policy and Planning Branch, and the Environmental Assessment Branch of Renewable Resources; the Department of Economic Development, and the Department of Community and

Transportation Services. This group participated in drafting criteria and indicators to be used as the basis for the evaluation, and identified sources of information. They also brought forward additional issues and questions.

The evaluation was also assisted by an advisory committee composed of a broad cross-section of organizations representing interests in agriculture, fish and wildlife, conservation, outfitting, trapping, and recreation. This "Yukon Agriculture and Grazing Lease Policies Review Advisory Committee" provided additional advice on the same topics addressed by the government Working Group.

The research and interview program provided open opportunities for all interested parties to provide input on subjects of their own choice. Each First Nation and each Renewable Resource Council received a letter providing information about the evaluation and inviting contributions to it. A wide spectrum of stakeholder organizations also received invitations, and a series of newspaper advertisements invited the public to phone, fax, or mail comments. Over 20 individuals and organizations responded to this advertisement. Interviews were held with key personnel from relevant government agencies, with First Nations and Renewable Resource Councils in a selection of agricultural areas, and with a cross-section of farmers, land applicants, and interested persons across the Yukon.

Although the research and interview process was well publicized, open, inclusive, and broad, it was not intended to be a numerical survey of public opinion. Nor is this report simply a recitation of what was heard. Most of the opinions and recommendations received were highly personalized, many were conflicting or even contradictory. The information was critically analyzed against objective data where available and against the evaluation criteria.

The Agriculture Policy recognized the following general goal: "to promote a sustainable, self-sufficient (market-driven), and economically viable industry in the territory." The policy intent was that it be *environmentally* sustainable (i.e. protects the agricultural resource base, protects other resource values), and presumably, that it be an industry which did not require marketing boards, price supports, and similar market interventions.

Although the Agriculture Policy states goals and objectives, these really only establish general intent - no anticipated outcomes and defined targets were provided. Thus the desired effect, and whether the policy achieved it, is left largely to the opinion of the beholder. The policy evaluation must therefore infer expected outcomes and targets - these will vary among different people. The evaluation must take into account multiple viewpoints and subjective opinions as well as objective information in a consistent, systematic way.

By comparing criteria and actual outcomes against the expected outcomes of the Agriculture Policy, this evaluation identified a number of issues and problems. However, Yukoners differ markedly on these and how they should be addressed. The performance of the Policy and its

related issues were examined in light of three representative viewpoints which describe the general range of values and attitudes towards agriculture in the Yukon:

Agricultural supporters. This group believes that agriculture is a legitimate land-use in the Yukon and that its potential for environmental compatibility and economic feasibility is clearly established.

Agricultural skeptics. This viewpoint is not hostile to agriculture, but it frankly questions if an agricultural industry is realistic. On balance, this appears to be a "mainstream view" which is also shared by many First Nations, Renewable Resources Councils, and environmental organizations.

Opponents. This viewpoint denies the legitimacy of agriculture as a land-use because it rejects the premise that it is economically feasible. These people consider low production figures, unutilized land, and property turnover as confirming their beliefs that agricultural land was acquired for residential uses or for speculation reasons. Included in this group are people who view wildlife and wilderness as a valuable resource which competes with agriculture over the use of bottomlands.

It is critically important to recognize that each the three viewpoints interprets issues and facts differently. The recommendations offered in this report aim to take this range of opinions and values into account while attempting to identify solutions or improvements to problems.

The chief problem areas are:

- Under-utilization of Agricultural Land
- The need for Production Inducements
- Land Pricing
- Game Farming
- Environmental Impacts of Agricultural Development
- Performance of the Land Disposition Process
- How Long Should the Land Program Continue?
- Non-Soil Based Agriculture

The recommendations are based on generally accepted principles:

- that public resources should be managed and used responsibly,
- that individuals should be able to realize dreams and ambitions which do not conflict unduly with public priorities, and
- that the public should realize benefits from the privatization of public resources.

The recommendations accept that developing a productive and profitable agriculture industry would be good for the Yukon economy. Accomplishing this should be an explicit goal - provided that environmental priorities and other social interests are maintained as well. This is obviously a balancing act. By founding a broad-based land program on locally-informed resource planning, resources and interests such as wildlife, trapping, hunting and recreation could be better

recognized and protected, and land dispositions could be facilitated. It is hoped and intended that the standing and the management of most interests would be improved.

The recommended policy strategy has five elements.

1. *Rely on planning processes to sort out the major resource allocation questions before land dispositions are considered.* Completing resource plans in support of the land program should be an immediate priority for Renewable Resources, working with Community and Transportation services, RRCs and First Nations. With proper leadership and funding this could be done in 18 months for most of the areas with agricultural potential.

2. *Provide a land program for the full range of rural lifestyle interests.* Avoid creating a need or incentive for applicants to misrepresent their interests in order to obtain land.

3. *Invest agricultural land prudently and productively in the hands of capable and motivated farmers.* Provide no more agricultural land than is reasonably needed to meet the defined objectives of applicants. Strongly encourage production on all new parcels.

4. *Encourage idle land from previous dispositions to be placed into production.* A coordinated approach will use extension services, incentives, and other means, including subdivision into smaller agricultural holdings, and sale and transfer of parcels from idle farms to active farms.

5. *Continue to preserve the agricultural land base by prohibiting residential subdivision and conversions into incompatible uses.* Consider converting unsuitable agricultural lands (unsuitable soils, microclimate, topography) into rural residential parcels.

The recommended strategic approach to disposing agricultural land accepts that people will attempt to use any available land program to meet their lifestyle interests. People will choose the avenue which will most easily satisfy their *essential* interests - they will compromise on their secondary interests.

- The first operating principle should be to deflect from agricultural lands interests which can be met on non-arable lands.
- The second operating principle should be to provide no more land than is needed to meet a person's essential goals.
- The third principle is to emphasize stewardship and wise use: conservation of the agricultural land base; and useful production on agricultural lands.

1. *Provide a land program for interests which can be satisfied on non-agricultural lands, and provide small agricultural lots if this is what is desired.*
2. *Provide opportunities for hobby-farms and part-time farms in planned offerings between 20 and 40 acres.*
3. *Provide large parcels (100 acres and more) to be developed into commercial farms only.*
4. *Encourage idle or under-utilized farm land to be put into production.*

5. *Revise game farming development requirements per suggestions in Section 7.4.*
6. *Collect accurate data relating to the measurement of Agriculture Policy objectives.*

By providing a broadly-conceived rural land program, it is intended that lifestyle interests would be substantially met *and* genuine agricultural development would occur. It is hoped that all resource users - farmers and non-farmers alike - can see their essential interests embedded in the suggested changes.

The Grazing Policy was also reviewed in this project and is presented as a companion report. This policy has fewer complications than the Agriculture Policy, and it is functioning satisfactorily. The most important recommendation is to avoid future problems by basing lease approvals on local or regional plans. Recommendations for operational improvements have been offered that address enforcement, public access, unauthorized uses of grazing leases, and a protocol for terminating leases.

Acknowledgments

People throughout the Yukon and from many walks of life contributed information, insights, and opinions to this project. Land is a sensitive subject: many people - largely those outside of government - were willing to speak frankly, but they preferred not to be specifically acknowledged.

Staff of the following agencies and representatives from the following organizations gave freely and generously of information, advice and criticism while serving on the committees which helped to steer this project:

- Agriculture Branch, Yukon Dept. of Renewable Resources
- Fish and Wildlife Branch, Yukon Dept. of Renewable Resources
- Policy and Planning Branch, Yukon Dept. of Renewable Resources
- Environmental Assessment Branch, Yukon Dept. of Renewable Resources
- Department of Economic Development, Yukon Government
- Department of Community and Transportation Services
- Yukon Fish and Wildlife Management Board
- Yukon Agriculture Association
- Yukon Conservation Society
- Yukon Outfitters Association
- Yukon Horseman's Association
- Yukon Game Grower's Association
- Yukon Trapper's Association

An evaluation applies a structured framework of analysis to its topic. Although an evaluation strives for objectivity, the analyst must ultimately bring considered judgement to bear in reaching conclusions. The writer takes full accountability for the content of this report, while thanking the many who contributed to it.

AGRICULTURAL POLICY EVALUATION

PHASE 2 REPORT

1.0 PURPOSE OF THIS EVALUATION

As stated in the Terms of Reference, "The purpose of the evaluation is to assess the effectiveness of the Agriculture Branch's programs in meeting the objectives of the Agriculture Policy. The evaluation will provide an objective measurement of policy implementation since 1991 and the basis to determine whether the policy needs to be revised. This evaluation also includes an assessment of the effectiveness of the Grazing Policy which was established in 1987." The Grazing Policy evaluation is presented in a companion document ("Yukon Grazing Policy Evaluation").

2.0 INTRODUCTION

2.1 Background:

The land disposition review process of the 1980s grew organically as agencies responded to the need to assess feasibility, suitability, and equity in transferring public lands. Through the 1980's these efforts focused on getting land into private ownership based on the assumption that agricultural production would naturally follow. The results were controversial and problematic. Some individuals received approvals for as much as 1,280 acres - some of which are not yet developed - while other people got no land at all. The 1990 Agriculture Policy intended to contribute design and direction to what had been a haphazard unfolding of development. Agriculture for the 90's: A Yukon Policy was approved in November 1991, having been informally adopted in February of 1990. This policy was a deliberate attempt to rationalize the Yukon Government's efforts to facilitate agricultural development.

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The Policy itself poses evaluation questions at the end of Section 1 and Section 2. Phase 2 of the evaluation is especially charged to answer these and other questions, including:

- Should the government continue to provide soil and/or non soil based agriculture parcels?
- Is there sufficient privately-held agricultural land to support the Yukon's agricultural industry?
- Is the agricultural land base being farmed and managed efficiently and effectively? Is too much agricultural land unused or underused?
- What are the resource conflicts?
- Is there any further justification for forgiving part of the price of the land in return for development work? Does the "2-for1" development formula work?
- What are the environmental impacts of agriculture in the Yukon, are they significant, what are the mitigation measures, is the end impact acceptable?
- Are land use regulations, including subdivision control, effective or necessary?
- Is there a need to introduce additional measures to protect arable land?
- Should penalties be put in place for non-use of agricultural land?
- Is the current size of agricultural parcels appropriate?
- What other options are available and feasible for land disposition and tenure?

Sources: Agriculture for the 90's: A Yukon Policy, and Phase 2 Terms of Reference

2.2 Approach:

The Phase 2 Evaluation received initial orientation and assistance from a Working Group composed of personnel drawn from of the Agriculture Branch, the Fish and Wildlife Branch, Policy and Planning Branch, and the Environmental Assessment Branch of Renewable Resources; the Department of Economic Development, and the Department of Community and Transportation Services. This group participated in drafting criteria and indicators to be used in the evaluation, and identified sources of information. They also brought forward additional issues and questions.

The evaluation was also assisted by an advisory committee composed of a broad cross-section of organizations representing interests in agriculture, fish and wildlife, conservation, outfitting, trapping, and recreation. This "Yukon Agriculture and Grazing Lease Policies Review Advisory Committee" provided additional advice on the same topics addressed by the government Working Group.

The research and interview program focused on the topics of the evaluation, while at the same time providing open opportunities for all interested parties to provide input on subjects of their own choice. Each First Nation and each Renewable Resource Council received a letter providing information about the evaluation and inviting contributions to it. A wide spectrum of stakeholder organizations also received invitations, and a series of newspaper advertisements invited the public to phone, fax, or mail comments. Over 20 individuals and organizations responded to this advertisement. Interviews were held with key personnel from relevant government agencies, with First Nations and Renewable Resource Councils in a selection of agricultural areas, and with a cross-section of farmers, land applicants, and interested persons across the Yukon.

Although the research and interview process was well publicized, open, inclusive, and broad, it was not intended to be a numerical survey of public opinion. Nor is this report simply a recitation of what was heard. Most of the opinions and recommendations received were highly personalized, many were conflicting or even contradictory. The reviewer treated all contributions as input to be critically analyzed. The reviewer acknowledges the contributions and assistance of many individuals and organizations, but he takes sole accountability for the analysis presented in this draft Report

2.3 Analytical Framework

It is quickly apparent that among Yukoners are widely divergent points of view about agriculture and about the Agriculture Policy. We know from everyday experience that people can draw entirely different conclusions from a set of "objective facts" depending on their values and points of view. Each observer will view the effectiveness of the Agriculture Policy in meeting its objectives through the filter of his or her own values and expectations.

A "policy" is defined as a set of decisions and actions designed to achieve a desired effect. A policy consists of objectives, strategies (or programs), and anticipated outcomes. The anticipated outcomes - the results - of a policy are the most reliable measure of its effectiveness. (Costs, efficiency, timeliness, and fairness are some of the other common measures.) Although the Agriculture Policy states goals and objectives, these really only establish general intent - no anticipated outcomes and defined targets were provided. Thus the desired effect, and whether the policy achieved it, is left largely to the opinions of the beholder.

The policy evaluation must therefore infer expected outcomes and targets - these will vary among different people. The evaluation must take into account multiple viewpoints and subjective opinions as well as objective information in a consistent, systematic way. The global question of the evaluation - "Is the policy effective in reaching its goals?" - can be reformulated into the following questions:

1. What is being pursued by the sponsors of the policy, by the agency implementing the policy, and by other participants affected by the policy?
2. Are these outcomes being pursued effectively?
3. At what cost - human, organizational, social, financial, environmental?
4. In light of the above, is the policy effective in achieving its outcomes?

To these can be added a further question:

5. Are the outcomes desirable? Should there be others?

The analysis used to consider these questions is structured and presented in this format:

1. What was intended by the policy - what were the expected outcomes?
2. What do the criteria suggest about the achievements?
3. What sorts of problems exist? Why are these problems? What are the effects? Who is affected? How significant are the problems?
4. What are the causes? (Immediate causes, root causes)
5. What are the options? What are the expected effects of the options?

3.0 THE INTENT AND EXPECTED OUTCOMES OF THE POLICY

3.1 Policy Assumptions

The Yukon Agriculture Policy was written to improve agriculture land programs which had produced high levels of dissatisfaction among both farmers and non-farmers during the preceding decade. It was based on the broad theory that if suitable land is placed in private hands, agricultural development will naturally follow.

When written, the Yukon Agriculture Policy was based on the following premises:

1. That agriculture was environmentally and technically possible in the Yukon;
2. That agriculture could be economically profitable and sustainable;
3. That the environmental effects of agriculture were acceptable;
4. That there was general agreement that developing an agricultural industry was desirable;
5. That the institutional frameworks, the financial structures, and the information base permitted the orderly development of the industry.

These premises were a strong statement of Yukon Government support for agriculture, because these premises were not and are not universally accepted.

3.2 Policy Goals

The Agriculture Policy recognized the following general goal: “to promote a sustainable, self-sufficient (market-driven), and economically viable industry in the territory.” The policy intent was that it be *environmentally* sustainable (i.e. protects the agricultural resource base, protects other resource values), and presumably, that it be an industry which did not require marketing boards, price supports, and similar market interventions.

The goal was based on the so-called “Import Replacement Model” formulated in 1983 which set out an economic rationale for agricultural development. It is difficult to disagree that import substitution is a good strategy. In an economy in which nearly all foodstuffs on store shelves are imported, virtually any local product which can be consumed in the Territory serves the goal of substitution. As stated in 1983, the goals for the Import Substitution Model were:

- 10 to 15% replacement of imported vegetables, potatoes, grain, and hay by 1990
- 14,600 acres would be in production for specified crops by 1990
- 80% import replacement would be the ultimate goal in 20 to 25 years.

When the 1990 Agriculture Policy was being written, it was unclear how close the agricultural sector was to achieving these goals. Even if the target date of 1990 was relaxed, the general concept and goals remained the basis for the Agriculture Policy.

3.3 Policy Strategy

The policy employed the following general strategy:

1. Identify lands capable of supporting agriculture or grazing;
2. Place suitable and capable lands in the hands of the private sector;
3. Require these lands to be developed to agreed-upon standards;
4. Provide agronomic information, tax incentives, and other industry supports as needed;
5. Count on economic self interest to ensure production on developed lands;
6. Count on market forces to identify profitable products and services;
7. Assist with developing industry infrastructure as needed.

The Agriculture Policy recognized that some institutional structures were needed to pursue its strategy. A rational process was needed for reviewing land applications, negotiating agreements-for-sale, inspecting and approving lease improvements, and releasing title. As originally written, this was the responsibility of the Department of Community and Transportation Services. (This was subsequently transferred to the Agriculture Branch in 1994.) Secondly, the Agriculture Branch must have research and extension capabilities to assist individual farmers and to help promote and develop the industry.

3.4 Expected Outcomes for the Agriculture Policy

The Agriculture Policy stated expected outcomes in only general terms and was largely silent about targets. The following expected results can be inferred by a close, contextual, and reasonable reading of the Policy:

Institutional outcomes.

1. The Agriculture Branch would be a capable and effective extension, research, and development agency.
2. An agricultural land disposition process would exist which was fair to all concerned, timely, yielded developed and productive agricultural properties, protected other public resource values and was orderly (relied mostly on planning to solve land allocation questions).
3. Public health and safety would be addressed by: a) product inspections, and regulations to encourage safe, wholesome food production; b) livestock control.
4. There would be close and effective cooperation with federal agencies, particularly Agriculture Canada.
5. There would exist an agriculture database: including statistics on agricultural inventory, value and costs of production, land area in production, and industry trends.
6. Mechanisms would be in place to protect the arable land base from conversion to incompatible uses.

Industry outcomes.

1. An agricultural industry would exist which produces food and other products that replace imported goods;
2. Farmland would be productively used;
3. An agricultural sector would exist which is economically viable and profitable.
4. Farms would be environmentally sound (maintain soil productivity, water quality, genetic diversity of crops);
5. Agricultural development would occur in patterns which protect the habitats of wild plants and animals, especially those which are endangered or threatened, used for subsistence purposes, or are valuable to other economic sectors.
6. A variety and a diversity of agricultural operations and lifestyles would be evident.

Social outcomes.

1. There would be general public consensus and satisfaction that agricultural development has been good for the territory;
2. A strengthened economy, and increased employment in farming, food processing, services, distribution, and retailing would be evident.

3.5 Problems with evaluating expected outcomes.

The Agriculture Policy, which was meant to further a progression of orderly agricultural development, lacks targets which give substance and meaning to its goals and objectives. Without targets, reasonable people can differ in degree and in content over what was to be expected by any goal and to what extent it was achieved. For example, is 14,000 acres of titled farmland sufficient, too much, or not enough? How much land should be in production? What percentage of imports should be replaced? How do these measures relate to each other? Secondly, the Agriculture Policy sets no time targets or thresholds for when a result was to be reasonably expected. Lacking these, reasonable people can also differ: a critic can complain that low production and land utilization levels represent a failure of the industry and the policy which supports it; an agricultural proponent can counter that this is unreasonably hasty - it takes a generation or two to build an agricultural industry. Thirdly, the information base is spotty: there is a lack of data in many areas and only partial or equivocal data for other topics.

The Agriculture Policy presents an outline, or a sketch of how agriculture can and should develop - the public has been left to fill in the details. Given the latitude, people can - and will - complete the picture in quite different ways.

4.0 EVALUATION CRITERIA AND REPRESENTATIVE VIEWPOINTS

4.1 Developing Evaluation Criteria

Even though targets and timetables are mostly lacking for the Policy, it is still possible and necessary to measure its effectiveness. The first step, outlined in Section 3, is to infer or reconstruct what it set out to accomplish. The next step attempts to estimate how effective the Policy has been in doing this.

When concrete targets or standards for determining success or effectiveness have not been established, *criteria* can be devised. In this evaluation, criteria are clear statements which collectively describe an effective policy - or alternatively, an ineffective policy. Criteria flow directly from descriptions of the expected outcomes. Some criteria can in principle be directly measured, but other criteria are less specific and must be weighed by *indicators*. A direct indicator is a straightforward measure, such as *number of farm titles issued*. An indirect indicator is a step or two removed: for example, the *volume* of production only indirectly casts light on the *value* of production, which in turn only hints at *profitability*. Indicators can also be comparisons with benchmarks recognized elsewhere: such as the cost of Yukon farmland compared with the cost of farmland in northern Alberta.

The interdepartmental Working Group and the public Advisory Group helped to identify criteria and indicators for the Agriculture Policy and the Grazing Lease Policy. Each of these groups represented a diversity of values and opinions, and consensus was needed for the final list. Not all criteria were accepted. The list of criteria which were accepted is comprehensive and value-neutral. Collectively, the criteria describe a successful, effective Yukon Agriculture Policy:

1. A well functioning land application and disposition process exists.
2. Significant agricultural production occurs.
3. Agricultural lands in the Yukon are effectively used.
4. Other resource values are respected.
5. Environmental impacts are minimized.
6. Agricultural land development is orderly.
7. Effective extension service is provided.
8. Needed infrastructure exists.
9. Needed services exist.
10. There is general social consensus and acceptance of the agricultural industry.
11. Public costs of agricultural development compare favorably to economic benefits.
12. Opportunity for a diversity of lifestyles exists.
13. Industry is profitable.

The Working Group and the Advisory Committee were able to reach consensus on these criteria in part because they refrained from applying standards and time-lines. All could agree that environmental impacts should be minimized and that other resource values should be respected, (Ag. Policy criteria #s 4, 5), but it was sensed that it would be time-consuming and perhaps fruitless to seek consensus about what the criteria meant in practical terms.

Since the two groups reflected the diversity of opinion found in society, it was a success that their members could agree on criteria. It would have been surprising if they had recognized common standards. The preconditions for reaching such agreement do not exist: insufficient common ground has been established to move to the next level of detail.

4.2 Identifying Representative Viewpoints

Yukon society is diverse and on some agricultural topics, polarized. Because of this, there are few common measurements and standards which can be applied to the evaluation criteria. A more useful approach is to learn what people of various viewpoints expect of the policies.

The interview and research process revealed a wide range of opinions and attitudes about agriculture. By identifying common elements, these can be sensibly clustered into three broad viewpoints, or value-sets. These viewpoints are outlined below. It is not the purpose in this evaluation to critique or to defend any point of view - it is sufficient to present them so that the expectations of each can be compared with the outcomes as indicated by the policy criteria.

1. *Agricultural supporters.* This group believes that agriculture is a legitimate land-use in the Yukon and that its potential for environmental compatibility and economic feasibility is clearly established. This group wants a fair and timely land disposition process, reasonable development conditions, and reasonable assessments of value. They are prepared to assume that land applicants are bona fide, and they believe that low land utilization and low production will be solved in time. They consider that developing a farm is a public benefit, regardless of its use. They consider themselves to be the primary clientele which the policies are meant to serve. This viewpoint likely contains most of the people who own or are applying for agricultural parcels. It also includes other people throughout the Yukon from many walks of life.
2. *Agricultural skeptics.* A “skeptic” is one who questions. This viewpoint has a “show me” stance: it is not hostile to agriculture, but it frankly questions if an agricultural industry is realistic. These people are prepared to give farmers a chance to demonstrate its potential, but they think that the public should release agricultural lands into private hands only for clearly defined purposes, which include actual production. This viewpoint focuses on the land disposition process:

it must be fair, balanced to preserve public interests in wildlife, recreation, and other resource values. The process must also be transparent and have integrity: agricultural lands should be farmed, and people should not receive lands which they do not need or intend to farm. Neither should people receive agricultural lands if they lack the experience or the capital to develop and operate them. Finally, this viewpoint looks to land utilization and actual production as evidence of sincere intent to farm. They have a tendency to favor starting with smaller farms to which land can be added on the basis of demonstrated need. On balance, this appears to be a “mainstream view” which is also shared by many First Nations, Renewable Resources Councils, and environmental organizations. It appears to be widely distributed throughout the Territory, but its prevalence cannot be established by this review.

3. *Opponents.* This viewpoint denies the very legitimacy of agriculture as a land-use because it rejects the premise that it is economically feasible. Some people with this viewpoint also hold that the environmental costs of agricultural development are unacceptable or that the costs outweigh the purported benefits. These people consider low production figures, unutilized land, and property turnover as confirming their beliefs that agricultural land was acquired for residential uses or for speculation reasons.

These groupings of viewpoints are informal. They are labeled for convenience to help describe the different expectations which the public have for the policies. Indeed, one ought not to speak of the “public” or of the “public interest.” More accurately, there are at least three “publics” - each composed of individuals with interests and values sufficiently close that they can be thought of as informal groupings. As with any social generalization, these clusters are not hard and fast - an individual may hold beliefs overlapping more than one viewpoint.

5.0 TAKING A MEASURE: APPLYING THE CRITERIA

Some of the evaluation criteria can be measured objectively, but not all - the data base is insufficient, or absent. Even so, for difficult-to-measure criteria, the experiences and views of people serve as subjective indicators. Strongly held and commonly expressed opinions about key criteria can serve as diagnostic tools which identify problem areas in the policies. Between objective and subjective measures of criteria, it is possible to “take the temperature” of the policies and detect what works and what doesn’t work for each representative viewpoint.

5.1 Criteria Applied to the Agriculture Policy

Criterion 1: A well functioning land application and disposition process exists.

The land application process generates widespread dissatisfaction. In an independent project, the Yukon Agricultural Association reviewed the Policy with its members and issued a report with strong criticisms of the land program from applicants, would-be applicants, and former applicants. This program is the most common source of complaints received by the Department of Renewable Resources, and it was the most common topic in the submissions received by this evaluation. Agricultural supporters cite the land program as the biggest single impediment to the growth and development of agriculture. They believe that it is institutionally opposed to releasing land. People of a “preservation” values-set consider the land program to be partisan towards agriculture and callous in its disregard for other resource values and interests.

Complaints from applicants center on

- excessive time for decisions,
- a high likelihood of rejection for what applicants feel to be needlessly restrictive grounds,
- burdensome development conditions of agreements-for-sale,
- poor information flow, poor communication, and poor relations with clients

Complaints from non-applicants center on:

- hasty decision making,
- decisions which do not adequately consider other resource values and competing interests,
- poor information flow, poor communications with other affected parties,
- inadequate standing and influence of competing interests in review bodies,
- inadequate screening for qualified applicants,
- inadequate environmental conditions and development conditions.

It is clear that applicants and their opposites have differing expectations. In a detailed analysis of the agricultural land application review and disposition process it was determined that under the *best case* conditions, an agricultural applicant on federal land could receive a response no sooner than in 210 days. This assumed the unlikely case that there were no conflicting concerns and that the applicant, the review agencies, and consultative processes operated at minimum response times according to published policy standards.

A decision from the federal review committee does not result in an agreement-for-sale. A federal Order-in-Council (O.I.C.) is needed to transfer the land to YTG - typically taking between 4 and 6 months. Thus under the ideal case, an agreement-for-sale from federal lands takes one year at the minimum. An additional 8-12 months might be required if the review was delayed by the season needed for field inspections, by wildlife or heritage studies, and by First Nation consultation. Since these are common occurrences, 2 years is a realistic but optimistic target on federal lands. On YTG land where the O-I-C is not needed and for which the Agricultural Policy can be held to closer account, 170 days is the theoretical minimum decision-time, assuming that all things go perfectly.

The *actual performance range* of the process is between an ideal 170 days to reach an agreement-for-sale on YTG lands (13 months for federal lands), to extremes of over a decade. The ideal is rarely accomplished: it is more likely that inspections and review delays occur because of weather or workload. Delays can also occur in how quickly applicants, First Nations, or management agencies respond to requests for information or comments. Finally, protracted delays can occur when applications encounter substantive issues involving land claim interests, community interests, or the interests of other resource values.

Applicants are often unaware of the reasons for delays, nor do they understand or accept these reasons. Many do not know where their application is in the process and have no idea when they might get a decision.

At this point, applications carried over from the "old policy" should be distinguished from those reviewed by the 1990 policy. In 1990 when the new policy began, the review process had a substantial backlog of applications. Some of these had persisted for years because of problems created under the previous policy.

The 1990 policy was in part designed to ensure that new applications did not experience undue delays. After 1990, a priority for the Agriculture Branch was to clear-up backlogged "old policy" files while reviewing all new files under the new policy. While the records for the land application review process are not formatted for ready analysis, here is an indication of how the process has performed under the new policy:

	Old policy	1990 Policy	Total
Open application files, (as of Jan. 1990)	-?--		
Applications received (1990 to April, 1999)		235	235
Applications rejected	42	112	154
Agreements-for-sale reached	69	27	96
Titles from post-1990 Agreements-for-Sale	57	2	59

It appears that the process has been largely successful in its goal of clearing up the backlog of pre-1990, old-policy "problem files". Only a few of these remain: several are files which remain open while applicants proceed to develop successive parcels; several are files which cannot be approved in light of current conditions. If anything, the process would benefit from applying a "stale-date" to terminate files which are effectively unresolvable.

The land program has not been inactive with its current files. 250 decisions (agreements, rejections, approvals for title) have been reached since 1990, including 59% of "new policy" applications. It is not determined how many of the open files will be settled this year, nor what proportion of them will be approved.

Ultimate accountability resides with territorial politicians for the YTG portion of the land review up to and including the Agricultural Land Application Review Committee (ALARC). To a limited extent, Yukoners can bring some influence to bear upon it. It is difficult to detect any local accountability or responsiveness on the part of the Federal/Territorial Land Application Committee (FTLAC). In summary, the land application and review process pleases neither industry nor the broader public, although it has fulfilled the objective of getting agricultural land into private hands.

Criterion 2: Significant agricultural production occurs.

The most reliable data available comes from the 1996 Census of Agriculture Data for the Yukon and Northwest Territories, conducted by Agriculture Canada. For 160 Yukon farms, it showed a total value of farm revenues in 1995 to be \$3,536,098, or an average of \$22,100 per farm. A closer look at farm size reveals that 19% of farms were under 10 acres - these are typically classed as "hobby farms". An additional 33% are between 10 and 70 acres. Because the Census used aggregate data, it is difficult to determine how many of these are dedicated to production and how many are "casual" producers more interested in lifestyle amenities.

Management studies have often noted the validity of the "80/20 rule" - that 80% of the effect is produced by 20% of the participants. If this could be validly applied to the Yukon agricultural industry, then the top 20% (32 producers) would be averaging \$88,400 / farm. This is not

unreasonable, based on information gained from interviews during this evaluation. Some farms are grossing substantially more. A secondary indicator that the "80/20 rule" may be valid is that only 38 farms paid wages and salaries (24% of farms, for \$16,000 / paying farm).

What of the other 80%? It is difficult to say what portion of these farms are producing little or nothing, and which might be increasing production as each business progresses and develops. It is likely that Yukon farm owners are not uniform in their values and intentions. The data indicate that a portion of the farm community is personally and financially committed to commercial production. Here are some more indicators that significant production occurs on some of the 160 Yukon farms:

Total acres in field crops:	5,554	farms reporting:	87	av: 64 ac/farm
acres in oats	1,320	farms reporting:	34	
acres in hay	3,236	farms reporting:	48	

* note: revenues per acre for oats and hay approximately \$300/acre dryland, \$600 - \$900 /acre irrigated.

Livestock production

total cows and calves:	278	farms reporting:	14	av: 20/farm
total pigs:	264	farms reporting:	19	
total sheep	136	farms reporting:	5	
total horses:	995	farms reporting:	77	av: 13/farm
total elk:	108	farms reporting:	3	
commercial poultry	11,930 kg	farms reporting:	15	

By inference, some Yukon farms have "significant production", but a goodly portion do not. The data suggest that it may be more helpful to segregate "farmers" into groupings based on effort such as: large-scale commercial production, small-scale commercial production, lifestyle or causal production, and non-producers.

A second important indicator is the progress made toward import substitution as predicted in the Import Replacement Model. This model predicted \$9 million of production on 14,000 acres, or \$642/acre. The Census shows \$3.5 million on 5600 acres, or \$625/acre. This is close to expected values, even though it is behind its projected schedule.

Criterion 3: Agricultural lands in the Yukon are effectively used.

Two indicators shed light on this criterion: farm investment capital, which might denote how seriously a farmer has invested in developing a property; and land utilization, which shows what portion of farmlands are actually used.

Farm investment capital.

Yukon farm investment capital was reported in 1996 to be \$44,852,012, or an average of \$280,325/ farm. \$10,000,000 of this was in machinery, equipment, and animals. There would be \$19,200,000 invested in homes, if these were assumed to average \$120,000 each. A rough estimate of investment directed towards production (subtracting estimated home values from gross investment) would be \$25,652,012, or \$160,325 / farm in clearing, fencing, equipment, animals, and outbuildings.

Farm land utilization.

Departmental data show that in 1996 there were 14,500 acres under agricultural title. According to the Census, there were 5,678 acres of "land in crops". According to the Policy, a minimum of 53% of a farm parcel must be cleared and "greened-up" in order to fulfil an agreement-for-sale conditions. If all farms were developed to this standard, there would have been 7,700 acres cleared for crops. These figures generally indicate that some 2000 acres, or 26% of the land which was cleared for production was allowed to revert to non-agricultural uses. This performance is substantially better than was initially reported by the Agriculture Branch, but it nonetheless is a cause for concern.

It is evident that not all farms have remained in production after obtaining title. In view of informal observations that some farmlands were reverting to forest, in 1997 a survey of agricultural land utilization in the Whitehorse area was conducted. South of Whitehorse included the Carcross valley, Tagish, and Marsh Lake; North of Whitehorse included Laberge, and the Takhini valley.

	South of Whitehorse	North of Whitehorse
Adequate Utilization	21%	48%
Marginal Utilization	33%	20%
Inadequate Utilization	46%	32%

Land utilization is closely associated in the public eye with productivity, legitimacy, and with demonstrating the bona fide intentions of an applicant. Several First Nations have stated flatly that unused agricultural parcels are evidence of a "land grab" at the expense of the public, First Nations, and wildlife. Opponents of agriculture believe that people who develop, but do not use agricultural land want to acquire a rural residential estate, or are land speculators. Farm proponents, while acknowledging that some owners have no intention of ever farming, maintain that others are inactive only temporarily. Proponents also believe that some underutilized lands will become productive as they are sold to dedicated farmers, and that other lands will come into production as the personal interests of their owners change, or as financial means, knowledge, or market conditions improve.

Criterion 4: Other resource values are respected.

The opinions of interested parties - people who manage, use, or value other resources - are the most reliable indicators of this criterion. Conversations with wildlife biologists and wildlife managers, First Nations, Renewable Resources Councils, wildlife watchers, recreationists, guides, foresters, and environmental organizations convey a general uneasiness. Although the land application review process includes wildlife habitat specialists and accepts submissions concerning other resource sectors, its capacity to assess cumulative impacts on habitat is limited by the lack of resource planning.

Farmlands subtract from the resource base: recreationists lose ski and walking trails; subsistence and sport hunters as well as trappers have reduced opportunities. No hunting or trapping is permitted within a 1 km radius around every farmhouse. Two agricultural parcels with houses spaced 2 km apart will subtract 4 linear km of valley (6.28 km²) from hunting and trapping access. The cumulative effects of spot applications can be extensive.

Some agricultural proponents maintain that the land review process permits wildlife and other interests to dominate decisions. By contrast, some advocates of other resource values believe firmly that the process does not fairly consider wildlife, recreation, scenic, and spiritual values in the landscape. The land application review data indicate that the process genuinely attempts to factor other resource values: in 250 application decisions reached since 1990, 154 were rejections (62%). The chief reason for these rejections has been to respect other interests and resource values brought forward by First Nations, resource managers, and the public. A chief cause for delay in processing applications which are approved has been the need for resource evaluations, and the need to negotiate adjustments to the boundaries of applications so that other values can be protected. In the Watson Lake area, timber values (both unlogged, and regenerated stands) are a major blockage for agricultural applicants.

The data indicate that the process is designed to respect other values and that it attempts to do so. However, First Nations, resource managers, and other resource users have good reason to be concerned about the cumulative effects of its decisions in absence of resource planning. The serious loss of lowland habitat for the Southern Lakes Caribou Herd is a case in point, as is the substantial loss of elk habitat in the Takhini valley.

Criterion 5: Environmental impacts are minimized.

Chemical and pesticide runoff, soil erosion, and destruction of nuisance wildlife are indicators of environmental impacts. The Agriculture Census reports that 3,072 acres are treated with chemical fertilizer, but there is no evidence of agricultural runoff into Yukon waters. Gibson (1995) sampled and analyzed water from the Takhini River, which flows through the most intensively farmed district in the Yukon, and found no agricultural contamination. The Census also reports that only 129 acres have received soil conservation practices, but again, there is little evidence that erosion or soil degradation is a problem. Although there is no monitoring program,

soil scientists most familiar with Yukon agriculture state that their field work and site inspections reveal no examples of field-scale erosion. Further, they report that salinity, where it occurs, is a pre-existing condition and is not spreading due to irrigation (Scot Smith, Agriculture Canada, pers. comm.). Data on the destruction of problem wildlife is incomplete and does not distinguish between incidents on agricultural lands and those due to mining, rural residential, outfitting, trapping, fishing camps, cottage lots, or recreational activities. Wildlife managers believe that bears are most at risk, but agriculture does not appear to be the major cause of the ones listed.

Criterion 6: Agricultural land development is orderly.

Providing planned agricultural land releases is the chief indicator of orderly development. That spot applications were haphazard and should be avoided was accepted by this policy, which instructed that the land program should emphasize planned dispositions and that it should cooperate with regional plans. However, the record shows that spot applications have remained the mainstay of the land program under the new policy, with only a few exceptions. The Takhini Agricultural Subdivision on the Hotsprings Road (1996) released 7 lots. Although it is called a “planned” release, this does not satisfy the general intent of the Policy which envisioned releases based on broad-scale resource planning in rural and in undeveloped areas.

The Agriculture Branch is presently shifting towards more planned developments. It is committed to making land available in the Haines Junction area in cooperation with the Kluane Land Use Plan. The intent is to identify a large block of land which has agricultural soils and then release suitable parcels on the basis of detailed resource planning.

The existence of Land Use Plans and the integration of the agricultural land program into them is another indicator of orderly development. In an important respect, the disorderliness of spot agricultural applications have sparked planning. Several local area plans are in various stages in the Whitehorse area, inspired in part by controversies over spot land applications.

Although the Agriculture Policy states that regional and district-level plans will be used to guide agricultural dispositions, it did not address how to resolve differences which might occur between the policy’s overall goals and a regional-level plan. For example, the Kluane Land Use Plan (KLUP) was not accepted by the Yukon Government in part because it originally restricted agricultural dispositions to 10 hectares - an unacceptable constraint in the view of YTG. In this instance, it appears that Yukon-wide policies overrode regionally-expressed preferences. This issue resurfaced in the Whitehorse area as local Area Plans have sharply limited or excluded future agricultural dispositions. A collection of local plans could serve to neutralize the objectives of the Yukon Agriculture Policy piecemeal. This is a significant unresolved issue which should be clarified so that the experience with the KLUP does not recur.

Criterion 7: Effective extension service is provided.

The extension services of the Agricultural Branch were examined in Phase 1 of the policy evaluation, which was completed in February 1997 by an internal Yukon Government working group. The Phase 1 evaluation measured each program area under Section 1 of the Policy against reasonable criteria (Smyth 1997). Although data were sparse and the lack of performance targets made data interpretation speculative, the report concluded that the Branch program delivery was adequate to its resources and to the state of the industry's development.

The Yukon Agricultural Association evaluation report stated that the "Agricultural Branch is providing good quality extension services, but they are increasingly focused on the immediate Whitehorse Area." People interviewed during this evaluation spoke well of the extension services of the Branch. The Branch conducts agricultural research on growth and yield of crop varieties, and has tested the effects of irrigation and fertilizers. Through its Master Gardener courses, the Branch has helped to foster non-commercial gardening, an unmeasured but undoubtedly significant seasonal boost to import substitution.

Criterion 8: Needed infrastructure exists.

Infrastructure refers to the tangible things which support an industry such as roads, power, and facilities. It also refers to the institutional and economic structures which support an industry, including the laws and regulations, and a functioning market, including distribution systems and outlets for products.

The Agricultural Policy assumed that most infrastructure will develop as market forces provide opportunities. The Policy recognized that government support, encouragement and leadership may be required in some instances. Under the 1990 policy the Agriculture Branch was instrumental in establishing an abattoir, and in supporting farmers markets. The Branch also improved the institutional environment by helping to provide:

- meat inspection,
- regulations for game farming and animal containment,
- amendments to the Animal Protection Act,
- a new Animal Health Act.

The Land Application and Review Process is an important part of development infrastructure. The Yukon Government has not yet provided policies and regulations needed to minimize biological problems such as plant diseases, noxious weeds, and harmful insects.

The private sector and industry organizations are providing farmers markets in some communities. It is not certain whether the current low production levels reduce market opportunities, or if limited markets inhibit production. In general, it appears that few farmers fail to sell what they produce, but some farmers and the Yukon Agricultural Association state that the lack of regular market outlets has inhibited farmers from committing to and investing in steady production.

Criterion 9: Needed services exist.

Needed services include those which the public provides to support industry, and those which the private sector provides for profit. Under the Agriculture Policy, the Yukon Government provides meat inspection services, animal control officers, soil surveys and soils technicians, extension services, and market research. The Yukon has most other services needed by the agricultural industry such as veterinarians, egg-grading, farriers, and farm equipment mechanics. Most services are concentrated in Whitehorse, making access to services from outlying communities an ongoing concern.

Criterion 10: There is general social consensus and acceptance of the agricultural industry.

From the standpoint of public policy, this is an important criterion. The Yukon Agriculture Policy serves not only the agricultural industry, but society at large. Its central premise, that developing agriculture is a generally accepted goal, is suspect. The research conducted by this evaluation supports this statement.

It was beyond the scope of this evaluation to conduct a formal survey on public attitudes towards agriculture. However, the research gathered an extensive body of opinions and experiences provided by farmers, farmland applicants, government officials and resource managers, First Nations, Renewable Resource Councils, environmental organizations, and interested members of the general public. Together, this input provides a basis for informally grouping the general public into agricultural supporters, opponents, and those who guardedly accept agriculture. The research indicates that general acceptance of agriculture is undermined by a common perception that farmland is not well used, and that production values are not significant, and that the costs to wildlife and other resources exceeds the benefits. This leads some to the opinion that agriculture is commercially futile, and that it is undertaken for land speculation or for obtaining rural residential lifestyles. Others believe that the land disposition process is unfair to competing interests, and that it rewards misrepresentations. Many observers are sympathetic and are prepared to be patient and await results, but they expect to see Yukon products on store shelves.

Although this criterion is not well met at present, there are considerable opportunities for improving and broadening public consensus that agriculture is desirable. The agricultural sector might benefit from learning about local public preferences (e.g. organic products, pesticide-free products, grass-fed beef) and supplying these to local markets. The public at large is generally unaware of the agricultural industry, its size, and what it produces.

Criterion 11: Public costs of agricultural development compare favorably to its economic benefits.

Historically, agriculture has been an economic and social stabilizer for rural areas. Nationally, it is a major economic sector. In addition to the value of its production, Yukon agriculture generates considerable economic activity within the territory. Much of the \$44 million value of farm investment represented development expenditures which circulated within the Yukon economy. Many of the dollars associated with land clearing and development, home and building construction, fencing, well drilling, and equipment maintenance and operations pass through Yukon hands more than once. Moreover, nearly all of the annual expenses also circulate in the local economy.

Indicators of economic benefits provided by Yukon agriculture show strong growth:

	1996	1986
• number of farms	160	34
• value of production:	\$ 3.5 million	\$500,000
• Value of land and equipment,	\$44.8 million	\$ 4.9 million
• Number of people on agricultural properties	est. ~ 500	est. ~ 100
• # people employed in agriculture	N/A	
• annual costs of production	\$ 3.3 million	

The indicators of economic benefits to the Yukon compare favorably with direct costs to the Yukon public as indicated by the annual budget of the Agriculture Branch: \$587,000 in 1998. This is not the full extent of costs: many other branches contribute staff time to the agricultural program, and it is beyond the scope of this study to estimate the opportunity costs to other resource sectors of agricultural land alienation. Similarly, it is beyond the scope of this study to estimate the spin-off dollars into the Yukon economy generated by agricultural development and production expenses.

Criterion 12: Opportunity for a diversity of lifestyles exists.

An objective of the Agriculture Policy is to allow “for a reasonable diversity of opportunity and lifestyle for individuals interested in agriculture.” The 1996 Census indicates that this diversity indeed exists. There is a great range of parcel sizes, activities, and products. Further, parcels are widely distributed across the territory: although agriculture is heavily concentrated in the Whitehorse area, it is present in every region which has agricultural soils. This criterion is met well.

Criterion 13: Industry is profitable.

The 1996 Census shows industry revenues of \$3.5 million and industry expenses of \$3.3 million, for a net industry profit of \$200,000. Spread over 14,811 titled acres, this amounts to a profit of \$13.50 / acre, or a return on investment of .04%. This unimpressive overall record can be examined in different ways.

The positive interpretation:

Returning to the "80/20 rule", and based on interviews, it is certain that a dedicated group of farmers are indeed making profits. The profitability of some kinds of farm production in the Yukon is clearly established. The profitability of the larger number of part-time or supplemental farmers is poorly understood at this time. It is possible that production offers an important income supplement to some people who are employed part-time or seasonally.

The neutral interpretation:

The low profitability for the industry may reflect that it is still developing and has not yet reached its production potential. The 10-year growth trends lend credence to this view. In 1986, the industry was a net loss; in 1996 it showed a profit.

The critical interpretation:

The profitability figures indicate that Yukon agriculture is just hobby farming which emphasizes write-offs and expenses to subsidize a rural residential lifestyle.

It is perhaps probable that all three interpretations have validity for different segments of the agricultural community, which can be stratified by degree of dedicated commercial effort, by size and type of operation, and by how long a farm has been operating.

6.0 EXPECTED OUTCOMES COMPARED WITH OBSERVED OUTCOMES

The criteria indicate that there are differences between expected outcomes and observed outcomes of the Agriculture Policy. Each major viewpoint will see and explain these differently.

6.1 Expected Institutional Outcomes

Many of the “Institutional Outcomes” described in Section 3.4 have been substantially achieved, with two exceptions:

- *“An agricultural land disposition process would exist which was fair to all concerned, timely, yielded developed and productive agricultural properties, protected other public resource values and was orderly (relied mostly on planning to solve land allocation questions).”* Most observers from whatever background would agree that this expected outcome has not occurred. There is little agreement why this objective has not been achieved, what this failure means, and how to correct it. It is fair to say that the land disposal system is responsive to neither industry needs nor to broader public needs.
- *“There would exist an agriculture database, including statistics on agricultural inventory, value and costs of production, land area in production, and industry trends.”* This expected outcome has been only partially attained. Several categories of information for policy decision making are unavailable or are difficult to obtain. These include land area in production, the values and costs of production in relation to parcel size and geographic district, and the output and value of non-commercial gardens. Other relevant categories of information have not been assembled in forms useful to decision-makers - a prime example of this are mapped resource values and land uses in a GIS form useful to land application review and to land planning. The LIMS (Land Information Management System) and the Renewable Resources GIS applications now under development should provide the basis for correcting this problem. A primary objective should be to design and implement an information-gathering program.

6.2 Expected Outcomes for Industry

Most of the “Industry Outcomes” either have not been achieved, or have been just partially achieved, or have been achieved only in the view of some observers.

Two expected Industry Outcomes have been substantially achieved from the points of view of most observers:

- *“Farms would be environmentally sound (maintain soil productivity, water quality, genetic diversity of crops)”*. The 1995 study on water quality did not show that agriculture was contributing contaminants into Yukon waterways. According to a senior Agriculture Canada soil scientist with years of Yukon field experience, there is little if any evidence that soil productivity has been damaged, that salinity is increasing, or that soil erosion is occurring because of agricultural development (Scott Smith, pers. comm). Only generalized concerns about reductions to genetic diversity have been raised, but no examples or evidence have been offered. Although environmental indicators are favorable, there are no monitoring programs to detect changes to them.
- *“A variety and a diversity of agricultural operations and lifestyles would be evident.”* As indicated by the Census, this outcome has been achieved, and it is clear that demand continues for a diversity of lifestyle opportunities to be provided from public lands.

These expected Industry Outcomes have not been achieved or have been only partially achieved:

- *“An agricultural industry would exist which produces food and other products that replace imported goods.”* Agricultural supporters argue that this is indeed being fulfilled by some farmers, and that it will be better fulfilled as the industry continues to develop. They maintain that the time needed and difficulties encountered in developing land are greater than was anticipated. Agricultural skeptics are prepared to wait and see, but they point out that there is little evidence of available products in stores or markets.
- *“Farmland would be productively used.”* Nearly everyone, including industry representatives, agree that there is a “problem” of unutilized farmland, and data support this common view. Reasons for this are various and complex; their policy implications will be discussed in later sections. People’s perceptions may be self-reinforcing: unused farmland and agreements-for-sale still under development look much the same. Unused farms, non-soils agricultural parcels, and rural residential properties may also be lumped together by some people. Highly visible parcels which are unused or are still developing will tend to confirm their biases. Unutilized land is called a “problem” because it has become an issue and a point of criticism.
- *“An agricultural sector would exist which is economically viable and profitable.”* Most observers, both within and outside of the agricultural industry, would agree that this outcome is largely not achieved. It should be pointed out that there are a number of “success stories” which demonstrate that economically viable and profitable farms exist in the Yukon. There is no reason why there cannot be more. Less certain is how long it will take, and what is required, and how this progression can be assisted. It is also important to recognize that agriculture is probably no different from other resource-based industries in the Yukon in that even relatively small revenues may be significant because they supplement other sources of income, part-time employment, and the food budget.

- *“Agricultural development would occur in patterns which protect the habitats of wild plants and animals, especially those which are endangered or threatened, used for subsistence purposes, or are valuable to other economic sectors.”* Agricultural supporters assert that this outcome has been achieved. Skeptics tend to be concerned that impacts to wildlife might increase, while wildlife advocates maintain that this outcome has not been achieved. Most observers agree that despite good intentions, the land review and disposition process is poorly equipped to consider cumulative impacts. Wildlife managers, recreation advocates, trappers, and foresters point out that agricultural developments - like residential developments - tend to diminish their interests without the aid of broad-scale resource planning. This has been their recurring message to the land review process and in interviews.

6.3 Expected Social Outcomes.

Expected social outcomes have been substantially unfulfilled.

- *“There would be general public consensus and satisfaction that agricultural development has been good for the territory.”* As discussed in Sections 4.2 and 5.1, public consensus and satisfaction concerning the agricultural industry is significantly lacking, and views about it are polarized, separated by a middle ground of skeptical tolerance. As will be discussed in subsequent sections, there is considerable opportunity to progress towards this expected outcome.
- *“A strengthened economy, and increased employment in farming, food processing, services, distribution, and retailing would be evident.”* A strengthened economy due to the agricultural sector is not widely apparent, although Census data show that substantial benefits have accrued. Further economic growth with observable effects will likely occur as the industry continues to develop. Progress towards this outcome can be improved with better information: many Yukoners appear to be uninformed or mis-informed about the accomplishments of the industry.

6.4 Discussion

There is a discrepancy between expected outcomes and observed outcomes for the Agriculture Policy. Usually this indicates shortcomings in a policy, but their nature is not certain. There may be more than one reason; some of the possibilities include:

- The policy may be poorly designed - its programs do not effectively promote its objectives and goals.
- The objectives and the expected outcomes may have been unrealistic - they may be improbable or impossible.

- A longer time may be required. The expectations might be achievable, but the policy may have to “stay the course.”
- Reasonable people may reach different conclusions about whether the expected outcomes have been achieved. Achievement may be in the eye of the beholder if people recognize different targets.

Despite best efforts, there could be analytical weaknesses which could be corrected:

- The statement of expected outcomes may be inaccurate. Since the Agriculture Policy did not specify its expected outcomes, they must be inferred from reasonably studying the policy and other sources of information. A different set of expected outcomes might have fewer differences with the actual outcomes.
- The measurement of actual outcomes may suffer from incomplete information.

Although this analysis, like any, can benefit from better information, it is still reasonable to conclude that the Agricultural Policy has significant problems and issues in how it supports the agricultural sector.

7.0 REVIEW OF ISSUES AND PROBLEMS

The focus of this evaluation is the land application and review program. The fundamental analysis questions for this section are: *Should the government continue to provide an agricultural land disposition program? If so, how should it function, for what purposes, and for how long?*

In order to address these questions, it is necessary to examine the major problem areas and issues seen to affect the land program. These include:

- under-utilization of agricultural land
- the need for production inducements
- land pricing
- game farming
- environmental impacts of agricultural development
- performance of the land disposition process
 - speed
 - fairness
 - quality of decisions (competing interests, cumulative impacts)
- non-soil based agriculture

7.1 Topic: Under-Utilization of Agricultural Land

It is clear from research and surveys that Yukon agricultural lands are not being fully utilized, and that this disturbs several segments of the public. As discussed in Section 3.4 of this report, underutilized land was not an expected outcome of the policy. There are several reasons for it. In part it is a reasonable and logical result of one of its objectives - specifically Objective 3.d., which “allows for a reasonable diversity of opportunity and lifestyle for individuals interested in agriculture.”

Since 1983, nearly anybody interested in a rural lifestyle applied to the agricultural land program since it was the only reasonably available outlet. Apart from a tiny private market, the only other way to get land within 30 km of a municipality was the rural residential subdivision lots occasionally offered by the Yukon Government. Even though these lots were quickly purchased and soon unavailable, this program did not suit the preferences of people seeking a homestead-like setting. The agricultural land program offered an alternative outlet which met this interest, and *it explicitly recognized the validity of a non-commercial, casual approach to agricultural production* (Policy Objective 3.d.). Indeed, the policy sent mixed signals to lifestyle-applicants of the agricultural land program: it required that land be cleared, broken, and seeded, but it set out no expectations or requirements for it to remain in production after title was granted.

It casts no reflection on the sincerity of many agricultural land holders if they did not continue production after obtaining title. They were not asked or required to keep farming. Some people had only a marginal interest in agriculture anyway, and as the policy was written, serving them was legitimate. Neither the policy nor the land program were structured to weigh how serious

applicants were about production. It was sufficient that an applicant established general intent and means. Among the "lifestyle agriculturalists" there were many reasons to cease production after getting title: some had only slight intentions from the outset, some experienced financial setbacks or development delays, some had personal difficulties, while others simply lost interest or changed their minds. All of these are acceptable outcomes within the policy's Objective 3.d.

53% of all titled properties are under 69 ha. in size. It is likely that most "lifestyle-agriculturalists" are in this bracket - the costs of land development are so high that few people would undertake more expense than they needed to satisfy their interests. If, however, one's interests included investment, then it was (and remains) rational to develop properties of whatever size one can, since agricultural land has been shown to be a blue-chip investment. If this is a motive, then by developing agricultural land, one can acquire and enjoy large amounts of privacy while preserving or increasing one's net worth.

That some applicants have been motivated by investment and not by production is beyond question. Most of the truly large agreements-for-sale resulting from the early 1980s (some up to 1200 acres) have shown a pattern in which parcels were sold soon after coming to title. Turnover was not limited to the handful of giant agreements - properties of all sizes have changed hands in the last decade. Development and subsequent re-sale is not necessarily bad, nor does it necessarily lead to under-use. If the next owner is a dedicated farmer, it does not matter that the first owner did the development work. However, with low land productivity and currently high land values (and still rising), it is likely that many purchasers will be more motivated by investment than by production.

The data do not show how many farms are underutilized. Farmers of all types report impediments to developing a farm and achieving production .

The time and costs required to develop a farm from raw bush are greater than many people realize. The agricultural land program, while it yields little direct revenue to the government, is by no means a "free-land" program. A "free-land" program would be just that: fee-simple land with no further obligations. Under the agricultural program, however, acquiring land entails significant, expensive obligations before fee-simple title is granted after 5 years:

1. A value for the land is determined, based on an estimation of the "market value".
2. Within 5 years, the recipient is required to complete an agreed-upon amount of development improvements on the land worth double the market value. If final development costs are not at least twice the market value, the farmer may pay the difference in cash.
3. If the agreement is for a soils-based parcel, a minimum of 53% of the land must be cleared, cultivated, and an initial crop successfully grown.

While many of these costs are not hard-cash expenses (the value of "sweat equity" can be negotiated), the amount of out-of-pocket cash is enormous - as is attested by the \$44.8 million in farm investment shown in the 1996 Census. A typical example: clearing, breaking, and seeding

53% of 160 acres amounts to about \$450 /acre or \$38,250 total. Buildings, fencing, well, power, and access must be included. These add substantial costs.

It is common for farm developers to run short on time and cash. The development period is all expense - there can be no income from the land until development is completed. Few people have the entire sum of development money in-hand - most farmers must work to provide a family income in addition to providing for farm expenses. The time devoted to earning is time taken from the farm development schedule. Typically, developers must strain to meet the inspection deadline on the 5th year. Financial constraints often dictate that only the minimum standards will be met. Those who have experienced this bind, report that they arrived at the end of an agreement for sale financially exhausted, drained of energy, and needing a job. Under these circumstances, it is understandable and predictable that agricultural production is not a priority.

This is not an easy problem to correct. It is difficult to borrow money during this period, since an agreement-for-sale is not usually recognized as collateral by lending institutions. People who can sell other major assets (typically their home and property) experience less difficulty. People with skills in construction, heavy equipment operation, and equipment repair and maintenance can supply more sweat equity. Most people show a complete financial commitment to an agreement-for-sale, and there have been only a few defaults.

The combined strain of successively meeting development standards, achieving title, and being prepared to move into production could be eased in a few ways:

- improve access to capital - either provide a way in which agreement-for-sale lands can serve as collateral, or provide loan guarantees to lending institutions;
- lengthen the agreement-for-sale period;
- reduce the amount of development work required,
- select well-capitalized applicants for big projects.

Critics assert that land is underutilized in the Yukon because production is not economically viable. They believe that this is a "red flag" indicating systemic problems with the objective of developing an agricultural industry. Like many such comments, this is partly true and partly false. Poor land utilization does show that the policy did not promote agricultural development as well as it intended to and that some developers had non-farming objectives. It does not follow from this that farming is fundamentally uneconomic in the Yukon. Economically viable farms producing a wide variety of products including forage, vegetables, beef, and other livestock exist here.

Under-utilization does indicate that the policy should account for environmental variations which impose constraints: for example, the agricultural areas of the southwest Yukon have significantly less precipitation than the central Yukon and the Liard valley. In some microclimates of the Whitehorse / Haines Junction area, the evidence is that access to irrigation is critical to the success of farms. In such areas, it may have been a mistake to allot parcels which had no water, and it may be unrealistic to expect better utilization and production on such parcels. Similarly, it

was likely a mistake to have cultivated some of the saline soils. Both of these limits are now well-recognized.

It has been demonstrated from research in the Takhini Valley that attractive economic opportunities exist for lands which can install irrigation. Specialty operations such as game farms can also be profitable. There is no fundamental environmental or economic reason why under-utilization cannot in principle be corrected if water - and capital - are available.

7.2 Topic: The Need for Production Inducements

It was expected that the Agricultural Policy would help to foster a productive and profitable industry. Low land utilization indicates that the industry could be producing more and creating a larger economic effect. Low land utilization opens the question of whether the industry in fact has more land than it needs or can use, and whether the land program should continue. It is natural to consider strategies to stimulate increased production. Through its land tax rebate program, the Agriculture Policy provides for a form of incentive - one which has never been implemented:

“The rebate program will allow farmers who produce a minimum of \$3,000 gross value of agricultural product to claim a full refund of taxes paid directly to the Yukon government, for the agricultural land and specified agricultural buildings. The minimum gross product value will increase to \$5000 two years after the Agreement for Sale has been issued.”

Taxes on homes would not be included in the refund.

Agricultural parcels are taxed at a lower agricultural rate, which on average are 53% lower than those paid on a comparable rural residential site. Agricultural tax rates on idle farms irk those who pay rural residential rates. They suggest that non-producing farms should be taxed at rural residential rates. Rural residential lot owners think it is unfair if adjacent landowners are taxed differently, even though their actual property uses are identical. Perhaps a disincentive for not producing (i.e. receiving a rural residential tax rate), complemented by the existing tax rebate for production, may stimulate more farmers. It is unlikely that a tax program by itself will do very much, since the actual difference in dollars is rarely so great that it would compel an owner into production. However, it may be part of a larger strategy.

There appears to be little justice in considering penalties for not producing. From the point of view of the government, the policy clearly intended and expected that production would result from land disposition. However, from the point of view of applicants, production was seen to be optional. The policy specifically allowed for a “reasonable diversity of opportunity and lifestyle”, and the policy said nothing about continued production after title was granted. In view of the policy’s mixed messages to its clients, production is better thought of as a goal which attracts, rather than as a duty which must be compelled. The extension efforts of the Agriculture Branch can better affect the low land utilization question by showing how a profit can be made on an otherwise idle asset. The tax program, by applying rural residential rates to idle farms, can reinforce the point, while relieving the perception of unfairness.

7.3 Topic: Land Pricing

Land pricing: "market value" and the "2-for-1" requirement.

A notable change installed by the 1990 Agriculture Policy was the method it imposed for land pricing. The previous policy charged a \$500 administration fee and the applicant was required to perform a schedule of development work. The new policy stipulated that

- a) the "market value" of a parcel would be determined and charged;
- b) developments to be required of the applicant would be stated in a Farm Development Agreement; and
- c) one-half of the value of the approved development work could be used to offset the sale price.

This is the so-called "2-for-1" clause. In implementing the new policy, the practice of the Agriculture Branch has been to peg the amount and value of development required to be double that of the estimated market value. This practice does not necessarily reflect the anticipated development needs of the applicant's business plan.

Outside of the Whitehorse periphery area, the current policy seems to be functioning without complaint: the market value of land is low enough that the developments required are reasonable for applicants. Within the Whitehorse area, the policy as it is applied appears to have reached a failing point - it is widely condemned by applicants and by the agricultural industry. They complain that market values produce land sale prices higher than a value based on the agricultural earning potential of the land. Holders of agreements-for-sale in the Whitehorse area state that because of high land sale prices, they must develop their parcel well beyond what is needed for production in order to meet the 2-for-1 requirement as it is currently applied.

There are a number of factors which produce high market values for agricultural land in the Whitehorse area. Values are likely bid upward by the relative scarcity of rural lands and a high demand for country properties outside of Whitehorse. The problem is not how market value is determined - these values result from reliable and well-accepted methods. The problem is how this market value is treated. By requiring of farmers improvements worth double that of the market value, farms in the Whitehorse area can become over-developed, according to farmers.

In seeking solutions to the pricing problem, the first task is to clarify the objective.

If the main objective is to create developed, productive farms, then the most effective approach would be to return to the flat fee charged by the old policy. However, if securing public good will is also a policy objective, then it is important that the government does not appear to be offering "free land". Some form of pricing should be retained. If this is the case, then an Agreement for Sale could be based on a cash price plus a stipulated minimum amount of development work.

- One approach would be to permit an applicant to simply pay cash for the market value of an agricultural parcel with the minimum requirement to clear some percentage of the

arable land. On a non-soils based agricultural parcel, the Farm Development Agreement could specify a minimum schedule of improvements based on the applicant's proposed business.

- Another approach for the Whitehorse area would be to only offer planned parcels with attached agricultural zoning and development conditions. If these were let by bid, the market would establish a price.
- A third approach would be to charge the full market valuation, but offer a "2-for-1" or a "1.5-for-1" rebate for any portion of approved development costs.

Merchantable Timber

Some agricultural agreements for sale have substantial volumes of valuable merchantable timber. Developers gain a windfall profit if they are granted merchantable timber free of charge. Such a privilege would stimulate people to seek out and apply for productive forest stands. Since not all parcels have merchantable timber, it cannot be claimed that the timber is essential to a farm development plan. Timber is a public resource - it is reasonable that the public should require that merchantable timber be salvaged and that stumpage be paid for it. Commercial loggers are prepared to do this if the job cannot be done by the farmer.

7.4 Topic: Game Farming

The game farming industry may be the most economically attractive agricultural sector in western Canada. The five game farms in the Yukon meet several criteria of success: they are profitable, they are well-utilized, they produce few documented environmental effects, and they produce animals naturally adapted to the Yukon climate. As export businesses, they help to correct the Yukon's balance of payments.

Game farms are governed under a separate policy and regulations, which reportedly are functioning well. Land dispositions for expansion or for new farms come under Section 2 of the Agriculture Policy. Like conventional farmers, game farmers are inhibited by the high-land prices assessed in the Whitehorse area. Game farms would benefit from more flexible land development conditions. Presently, game farms must meet all of the same farm development standards as conventional farms, but they face the added costs of expensive fencing. Like other farms, game farms are required to clear 53% of their land, even though they may have little or no need of fields.

Game growers believe that the land development criteria should be more flexible to better accommodate their needs. In selecting sites, game farms need not be restricted to Class 5 arable land. Since their animals browse and are given supplemental rations, game farms do not necessarily require arable land, which is in short supply, is in high demand, and is indispensable for other kinds of farming. Game growers point out that some operators are as well off to concentrate on raising animals instead of raising crops - after all, their animals provide a potential market for fodder grown by other Yukon farms.

Game farm Agreements for Sale could better serve this industry by:

- requiring less Class 4 or 5 land in proportion to Class 6 and 7 land;
- recognizing higher investments in fencing and game handling facilities in lieu of 53% clearing and seeding. Development conditions should include game fencing, cross fencing, control gates and agreed-upon stocking rates.
- providing more land to initial applicants, with potential to expand as needed.
-

Leasing land is not attractive to game farmers. They have the same interest in and need for obtaining titled land as do conventional farmers, especially since their fixed investment in game fences and facilities may actually be higher. Game farmers are not under-utilizing their land: quite the reverse, most are operating near to capacity and need additional land so that their businesses can expand.

If the Agricultural Policy intends to strengthen the economic benefits provided by agriculture, it would do well to revisit the development requirements for the game farming industry. At the same time, it is well to note that expanded game farming holding would increase the likelihood of impacts to wildlife, especially habitat loss and obstruction of wildlife movements.

7.5 Topic: Environmental Impacts of Agricultural Development

The actual environmental impacts of agricultural development in the Yukon have not been documented. No indications of water contamination or excessive soil runoff can be cited. The chief environmental concern centers on the landscape-level conversion of unsettled forest habitats to settled farmland. This affects a wide variety of resources, but none more than wildlife.

Moving the agriculture land program to Renewable Resources in 1994 strengthened the influence of wildlife managers. Even so, they note that the application review process produces piecemeal results by considering each application on its individual merits. It is not designed to address the cumulative effects of land development on a regional basis. Wildlife advocates are concerned that the cumulative, landscape-level effects of agricultural development may seriously erode wildlife habitats and ultimately wildlife populations in the Yukon.

Wildlife managers point out that in the Whitehorse area, large areas of valuable lowland wildlife habitat have been lost to agriculture from Mendenhall on the west, to upper Laberge on the north, and down into the Marsh Lake and Carcross Valleys. These are more or less permanent subtractions from the habitat base suitable for moose, caribou, elk, and bears. This habitat loss was not forecast when development started 20 years ago, and it was never tabled as an expected outcome of the Agricultural Policy. Wildlife biologists acknowledge that some wildlife species benefit from agricultural development, but not the forest-adapted species characteristic of southern and central Yukon valleys.

Many individuals, which include members of the general public as well as members of various Renewable Resources Councils, First Nations, the Yukon Fish and Wildlife Management Board, wildlife management agencies, and environmental organizations, have expressed a general uneasiness that the onus of proving adverse impact is usually applied backwards. They maintain that a *conservative* approach - that is one promoting conservation - would explicitly place maintaining robust wildlife populations as the central goal. Agriculture and other habitat-changing developments should be permitted, subject to wildlife goals. The YFWMB and others point out that a wildlife-centered economy has survived in the north for thousands of years, and that the agricultural paradigm is an unproven newcomer and should be approached with caution.

The wildlife viewpoint points out that what is good for wildlife habitat is generally good for a range of other resource users, including trappers, sport and subsistence hunters, recreationists, tourists, and - arguably - forestry. First Nations add that natural landscapes better preserve the basis of their cultural and spiritual values.

These are real and deeply-felt concerns. Under present circumstances, wildlife issues are largely resolved in a bureaucratic land-review process which is not designed to consider strategic-level options, the cumulative effects of incremental decisions, and trade-offs in values.

7.6 Topic: Performance of the Land Disposition Process

The agricultural land disposition program is universally criticized and widely disliked. Each of the major viewpoints identified in this evaluation are unhappy with the process for different, and sometimes contradictory reasons. A major change of approach is warranted, if the government wants to satisfy clients and the public.

The land disposition process is criticized for its speed (too slow for applicants, unduly fast in the view of interveners); its fairness (biased against applicants in the view of agriculturalists, biased against competing interests in the views of interveners,); the quality of its decisions (inhibiting the development of an agricultural industry in the view of agriculturalists, haphazardly eroding wildlife values and other qualities important to interveners); its inaccessibility; and its lack of accountability.

The disposition process, in trying to serve all, pleases few. The operational performance of the process can certainly be improved as was detailed in the 1996 analysis. However, a more fundamental problem is that the process is obliged to fill in as a substitute for land use planning. When the Agricultural Policy was written, it was expected that regional-level land use planning would be provided in the near term in many areas. The policy reads as if the agricultural land program would be delivered in the context of regional planning and that it would mostly offer planned dispositions. For a variety of reasons regional plans have not proceeded or have not been adopted. By default, the land disposition process incrementally evolved to handle a planning role for which it was not intended.

The review process is sensible for what it was designed to do. It is a good faith effort to provide a technical service which assesses the financial feasibility of the proposal, the environmental capability of the site, the legal status of the site, and considers how it will affect other resources and uses. The environmental assessment widely publicizes each application and invites comments from the public, from other agencies, from specialists, and from First Nations. The review process is substantially more rigorous than it was a decade ago, and by involving the regional biologists, it is attempting to examine cumulative impacts. It is evident from many of the complaints, that the process is not widely understood. Indeed, some criticisms are based on faulty information, and others focus on decisions made over a decade ago.

Despite its intentions and despite its improvements, the process cannot be adequate to its broader task. A closed-door, unaccountable agency committee cannot be expected to detect the public good, decide between competing values, resolve resource conflicts, and assess long-term, incremental landscape level changes - all this on the basis of scanty information and even less consensus. It is even less realistic to expect timely results from this effort.

Many of the complaints about the land disposition process (slow, cumbersome, secretive, inaccessible, poor communication, poor information bases) are consequences of placing what should be a technical body in a crossfire of competing interests. As it stands, ALARC and FTLAC inevitably come under heavy criticism from one quarter or another. These bodies consider strategic questions and trade-offs in values which can and should be addressed in open public processes. If strategic-level questions were resolved in public processes, the land disposition process could perform its technical function with less delay, more confidence, and fewer complaints.

A rational context of resource planning on which to base land disposition decisions does not have to await the formal Yukon Land Use Planning process (YLUP). YLUP is a creation of the UFA and has been awaited but delayed for many years. These delays may continue. It is, however, possible to construct a simple, straightforward process to address the majority of the questions which now plague the land disposition program. A version of this has already been largely completed by the Mayo Renewable Resources Council. It would give local direction to ALARC and FTLAC and it does not take years or large sums to complete. An agricultural district is mapped with the following overlays:

1. Soils maps identifying each class of agricultural potential. This information is largely in the possession of the Agriculture Branch.
2. Important wildlife habitats - gained from Fish and Wildlife Branch, and from local knowledge supplied by RRCs, First Nations, and other residents.
3. Important timber values - gained from Forest Resources and RRCs.
4. Important cultural, heritage, hunting, and recreational use areas. Gained by questioning local sources.
5. Land status, including Settlement lands, private holdings, leases, permit areas, and traplines.

This information is largely available, or could be with reasonable effort. Once mapped, the agriculturally suitable areas with no overlapping interests would be identified. The general pattern and distribution of agricultural parcels could be addressed in advance with community input. With this level of information, spot applications could be entertained with confidence, or planned releases could be determined. This would not be the same as a comprehensive land use plan, but it would serve the purposes at hand: *to permit socially and environmentally suitable development decisions in rural areas.*

If the resource overlays show that all sites with agricultural potential also have competing interests, it is likely that the land program should offer only thoroughly planned releases. By this measure, there should be no more spot applications in the greater Whitehorse area because there is such intense competition for land.

7.7 Topic: How Long Should the Agricultural Land Program Continue?

The land program generates most of the issues for the Agriculture Policy. Alienating public land is normally a one-time historical event, and the strategic consequences and the opportunity costs are great. Many people are reluctant to have public land privatized unless it is seen to be for a good purpose. Because of this reluctance, people scrutinize how dispositions are eventually used. From the standpoint of government, the agricultural land program is fraught with peril - it is almost certain to displease people regardless of how it is delivered.

The question posed by the policy (“Is there sufficient privately-held agricultural land to support the Yukon’s agriculture industry?”) is essentially asking: *How long is it necessary for the government to continue its agricultural land program in order for the industry to be stable and profitable?* It is important to notice the difference between wants and needs; between meeting the public demand for land, and supplying what is needed by industry to be economically viable. One addresses social satisfaction; the other addresses economic requirements.

How much land does the agricultural industry *need*? This is the crux question - the point on which concerns about productivity, land utilization, and profitability focus. How can one tell when the industry’s *need* for land has been met? Here are some possible indicators; each will be examined in turn:

1. When applications for agricultural land decline.
2. When existing titled agricultural lands are not being used.
3. When there is an adequate private market in farms.
4. When the industry is operating at some economic threshold or level of production
5. When the conflicts from competing interests over each new parcel are too intense for the land program to decide.
6. When there are no more vacant agricultural lands.

Discussion of Indicators of Sufficient Agricultural Lands

Indicator 1. When applications for agricultural land decline.

This is both a social and an economic indicator. So long as public land remains available, it is likely that someone will want it, regardless of the state of the industry. If a public land program continues too long, it will eventually undermine property values by saturating the supply of land. At some point, the diminishing interests of existing land owners - in addition to the interests of competing resource values - will become a serious issue.

Indicator 2. When existing titled agricultural lands are not being used.

By this indicator, one would conclude that the industry has sufficient land now since it isn't using what it has. By this reasoning, the land program should be closed, or at least placed on hold until the industry is able to develop and bring its current stock into production. However, it isn't useful or fair to lump all agricultural landowners together as "the industry." As the Census data seems to indicate, and as people knowledgeable about Yukon agriculture understand, the pool of landowners is not uniform, and it can be segmented in several ways. One useful segmentation is by *intention to farm*. As was discussed earlier, a portion of landowners legitimately acquired land having little or no intention to farm. It is not appropriate to expect that these "lifestyle landowners" must come into production in order to prove that the land program should continue. If, however, it is resolved to meet the industry's *need* for land, then future dispositions should discriminate between commercial needs and lifestyle ambitions.

Indicator 3. When there is an adequate private market in farms.

A small private market in farms exists already. The newspapers routinely carry listings, but are these enough? If some of these parcels are being purchased for country residential purposes, they are effectively *subtracted* from the agricultural base. Also, the prices of farms in the Whitehorse area are unrealistically high in relation to a farm's earning potential. This is a market effect of the shortage of rural land around Whitehorse, and it places some of these farms beyond the reach of commercially motivated farmers. For the time being, the private market may not be a reliable guide to the need for the land program.

Indicator 4. When the industry is operating at some economic threshold or level of production.

If the goal is to create a commercial industry, then individual enterprises must have sufficient land to meet their operational needs. Further, there are some production thresholds at which farms supply enough to support key infrastructure or to enter certain markets. Possible examples of productive thresholds:

- sufficient livestock and poultry to maintain the abattoir and supply the minimum volume demands of Yukon stores
- sufficient eggs to meet minimum volume demands of Yukon stores.
- sufficient hay for local livestock
- sufficient potatoes and vegetables to warrant building storage facility so that an extended period of supply can be furnished to Yukon stores.

Production thresholds may be a good indicator for when the land program is no longer be needed by industry. Using an economic indicator implies that the program should be adjusted to emphasize creating more commercially productive farms, and fewer lifestyle farms.

Indicator 5. When the conflicts from competing interests over each new parcel are too intense for the land program to decide.

Intense conflicts over competing interests and values are symptoms that vacant land is scarce. At some point, resource competition can so intensify that a land disposition process is paralyzed. This threshold appears to be near in the greater Whitehorse area. The useful life of a land program can be extended by relying upon planned releases which are open to public participation and allow all values and options to be equitably considered.

Indicator 6. When there are no more vacant agricultural lands.

The agricultural land program has disposed approximately 25% of the lands which have agricultural potential. Some in the industry believe that suitable soils are in such short supply that they should all be reserved for agriculture. However, people representing other resources also value these same lands. Developing the entire supply of agricultural lands would provoke social discord for many reasons and would likely seriously hurt certain wildlife populations.

7.8 Topic: Non-Soils Based Agriculture

The non-soils based component of the Agriculture Policy provides land for greenhouses, poultry raising, and other intensive operations which do not require agroclimatic class 5 soils. Spot applications for non-soils based parcels have been criticized as being a relatively easy way to acquire a homesite on rural land - one need not wait for a C&TS subdivision offering. The potential supply of sites is not limited by soils, and the development costs are usually less than would be required for a soils-based parcel. As with farm agreements, title is granted after development conditions have been met, but there is no requirement to maintain production.

Indeed, the distinction between the ultimate uses of a rural residential lot, a rural commercial lot, and a non-soils based agricultural lot can be difficult to detect. Considered in terms of land uses and potential impacts on adjacent landowners and resource interests, there is often little to distinguish between the three categories of rural lots, even when they are being used as intended. In view of this, there can be little reason to provide a separate outlet for non-soils based spot applications under the Agricultural Policy. In Section 9 the case is made for providing non-soils based agricultural lots as part of a broader rural lands program which is guided by land use planning.

8.0 STRATEGIC OPTIONS FOR THE LAND PROGRAM

8.1 Initial Observations.

The evaluation and review of issues show that in several areas, the agricultural land program did not produce the outcomes desired. Some of the issues raised result from shortcomings in the design and delivery of the Agricultural Policy. These can be influenced by policy revisions.

The policy alone is not responsible for the results. Some results will take more time than was initially believed - realistic time-frames should be determined. Further, some people appear to have unrealistic expectations. One can read much into a policy which does not present clear targets. Lacking specific targets, people form their own expectations based on their personal beliefs and values. That there should be disagreement over outcomes is predictable - especially if the outcomes are not clearly measured and publicized. The public should be widely informed of what is actually intended and what has actually resulted.

8.2 Premises for improving the agricultural land program.

Premise One. *The analysis should focus on improving future dispositions.* There is little leverage or justification for influencing the use of previous dispositions. Production on current parcels should be stimulated, but non-production should not be punished, except by recognizing idle farms for what they are - rural residential estates - and taxing them accordingly.

Premise Two. *Agricultural land should be treated as a valuable and scarce resource.* The accepted principles for managing and using valuable natural resources are those of stewardship, wise use, and equity. Agricultural lands are valuable public resources because they produce a wide range of important ecological and social benefits. Their value is increased because they are limited, scarce, and are the focus of competing interests. In some cases, valuable and heavily subscribed public resources are never privatized. When such resources are privatized, there are usually clear expectations of performance, how the resource is used, and of returns to the public.

For example, merchantable timber produces many benefits to the public as a natural forest. Society expects and requires a high return when it permits this resource to be cut: it should be used for sawlogs and not firewood, it should be well utilized, and the public should share in the benefits through stumpage, jobs, and products in the economy. Finally, the forest itself should be well tended and restored. When these expectations are not met, there is typically a public issue and an outcry for responsible resource use.

So it is with Yukon agricultural lands. The public has a right to expect genuine returns as a result of privatizing a public resource. It is poor stewardship and unwise use to distribute a valuable resource for low returns to society. In other words, in exchange for privatizing agricultural lands,

it is appropriate to expect economic benefits as measured by jobs, production, and secondary economic growth.

Because these lands are scarce, it follows that a strategic approach should be taken. Many lifestyle values can be met on non-agricultural lands; and some lifestyle and business objectives can be met on less land than is requested. It is a poor return to issue large supplies of a scarce resource to a person who is incapable or uninterested in producing the economic benefits which society is entitled to expect.

Premise Three. *People will attempt to meet their demand for land in any legitimate way.* They will strain the definitions of a land program if that is their only avenue. A strategic approach should recognize that there are a variety of legitimate interests in rural lifestyles. The government should have a rural land program to meet most of these. Currently, there are three ways to obtain a rural lifestyle from government lands:

1. By purchasing a rural residential lot in a subdivision laid out according to what the Department of Community and Transportation Services believes balances efficiency with what a rural resident “needs”.
2. By securing an agricultural parcel through an Agreement for Sale with development conditions per the Agriculture Policy.
3. By the federal rural land program if 30 km beyond municipal boundaries.

Since C&TS has rural residential subdivision lots available only infrequently, the agriculture land program is the only realistic option for obtaining land within 30 km of a municipality. This program has been pressed into meeting rural residential interests, and this will continue unless alternatives are provided.

8.3 Strategic Options for the Land Program

There are three broad strategic options for the agriculture land program.

1. Proceed with status quo.

The Agriculture Policy produces some of its expected benefits. Arguably, it produces all of them at least in part. It is possible to increase the speed and efficiency of the land disposition process and improve the quality of its decisions. More planning efforts would substantially reduce resource conflicts and social discord. These improvements will not much affect the problem of low productivity, which ultimately stems from not discriminating between applicants who are capable of farming from those who have only marginal intentions. Few people want the status quo to continue. Applicants want a swifter and more generous land process; other interests want a program that results in less wasted land, more productivity, and better resource management.

2. Close the land program or put it on hold.

One position says that the program should be put on hold until the industry is effectively using what it already has. A related body of opinion holds that the program should be closed, because the remaining agricultural lands have more important uses, because the industry is not effectively using what it has, and because there is now a private market in agricultural land. As discussed previously, this body of opinion is making an error in lumping all agricultural landowners together and then measuring the potential of the sector by the performance of people who are not really part of it. The effects of this strategic option would be to:

- needlessly close a program which can yield social and economic benefits,
- deny opportunity to applicants capable and interested in farming on the basis of an invalid comparison,
- create social discontent and pent-up demand comparable to what occurred as a result of previous land moratoriums - there is no evidence that the demand for land has been saturated.

3. Revise the Agricultural Policy and its strategy.

A strategy can be devised which meets the following objectives:

- substantially meets the range of demands for land and lifestyle;
- increases economic benefits by putting agricultural land into productive hands;
- reduces resource conflicts and land allocation conflicts;
- better protects other resource values and reduces environmental impacts;
- increases local influence over land use and allocation.

The basic precepts of a revised strategy are to solve the broad resource allocation questions at the outset through planning; match the right land for the right purpose with the right person; provide a land program for lifestyle interests; deny dispositions which are not in the public interest; and detect when a government land program has served its purpose. This recommended strategic approach is described below.

9.0 RECOMMENDATIONS

9.1 Clarify goals

The government cannot continue to provide a diversity of lifestyle opportunities *and* meet industry's needs for agricultural land without carefully distinguishing between the two.

Goals should be coordinated, especially related goals which have been pursued separately. A characteristic of the issues addressed in this evaluation is that the lifestyle demand for rural land overlaps both agriculture lands and rural residential lands. There are no hard and fast divisions between dedicated farmers, part-time farmers, hobby farmers and rural residential lot owners. It would be sensible to present a Rural Land Policy of which the Agricultural Policy is a component. A general goal for a Rural Land Policy would be to furnish land to provide for a range of rural economic and lifestyle opportunities. The Agricultural Policy would be a subset of this broader policy.

The initial step for the Agriculture Policy is to clarify and specify *What do we want to accomplish?* There is nothing wrong with the goals of the Agricultural Policy, but they should be clarified so that any reasonable person will draw a similar understanding of what they intend to promote. The Agriculture Policy could use the structure of Sustainable Development goals: to balance goals for the economy, environment and society. It should be stated plainly that the Yukon will promote agricultural development because it wants significant economic benefits. These benefits are expected in exchange for privatizing a valuable public resource. Further, developing agriculture will be subject to protecting the environment and protecting the interests of other resource users.

9.2 Specify measurable objectives and establish targets and endpoints.

The next step is to specify measurable objectives for attaining the goals, and set targets or endpoints. These can not be politically or bureaucratically determined; they are a combination of what is desired, what is possible, and what is likely. Economic, environmental, and social goals each need to have measurable objectives so that the public knows what they can expect from privatizing agricultural lands. The following objectives and targets are examples:

If an economic goal is to develop an agricultural industry which is economically viable, profitable, and stable, measurable objectives and possible targets could include:

- Land utilization - such as: "90% utilization of cleared land on new dispositions,"
- Production - revisit the Import substitution Model, or link production goals with infrastructure and market thresholds, such as achieving $x\%$ of abattoir capacity, or to occupy $y\%$ of store shelves.
- Profitability - new dispositions should be profitable after n years
- Self sufficiency - the industry should not require price supports or market interventions.

For an overall environmental goal of maintaining sustainability, measurable objectives could include:

- conservation of soil and water
- maintenance of agricultural land base,
- suitable use of agricultural land base,
- prevention of pollution
- protection of fish and wildlife habitats and populations
- protection of rare or endangered biotic communities

Social goals might be to provide for rural and agricultural opportunities. Measurable objectives could include:

- Provide for fairness and equity, as measured by general public approval surveys.
- Meet demand for various categories of land as indicated by applicant demand.
- Set endpoints for terminating the land program, such as:
 - program closing requested by residents through regional land use or resource plans
 - Diminishing supplies of agricultural land as indicated through regional plans
 - Robust market for land, indicated by stabilized or declining land values
 - Production thresholds or targets for industry.

9.3 Explicitly outline the policy strategy

The recommended policy strategy has five elements.

1. Rely on planning processes to sort out the major resource allocation questions before land dispositions are considered. Large-scale resource planning which recognizes wildlife and habitat, timber, trapping, subsistence and sport hunting, recreation, traditional and community uses can address cumulative impacts as well as specific issues. At this level, a community can indicate how many land dispositions would be welcome and where they could occur with least disruption to existing interests. With this completed, the land disposition process becomes more of a technical exercise to fine-tune a proposal to minimize site-level concerns. Resource planning need not await YLUP, it can be substantially completed by less formal processes. Where land claim agreements have been concluded, broad-scale resource planning can be completed relatively quickly, as was demonstrated in the Stewart Valley.

- Spot applications could be entertained in areas which have broad resource plans
- Planned releases should be the major outlet,
- Areas with many competing land uses - such as Whitehorse/Southern Lakes would be closed to spot applications.

Completing resource plans in support of the land program should be an immediate priority for Renewable Resources, working with Community and Transportation services, RRCs and First Nations. With proper leadership and funding this could be done in 18 months for most of the areas with agricultural potential.

2. *Provide a land program for the full range of rural lifestyle interests.* Avoid creating a need or incentive for applicants to misrepresent their interests in order to obtain land.
3. *Invest agricultural land prudently and productively in the hands of capable and motivated farmers.* Provide no more agricultural land than is reasonably needed to meet the defined objectives of applicants. Strongly encourage production on all new parcels.
4. *Encourage idle land from previous dispositions to be placed into production.* A coordinated approach will use extension services, incentives, and other means, including subdivision into smaller agricultural holdings, and sale and transfer of parcels from idle farms to active farms.
5. *Continue to preserve the agricultural land base by prohibiting residential subdivision and conversions into incompatible uses.* Consider converting unsuitable agricultural lands (unsuitable soils, microclimate, topography) into rural residential parcels.

9.4 Provide operational details for policy strategy

Operational details for the recommended policy strategy can only be sketched at this level of analysis.

The recommended strategic approach to disposing agricultural land accepts that people will attempt to use any available land program to meet their lifestyle interests. People will choose the avenue which will most easily satisfy their *essential* interests - they will compromise on their secondary interests.

- The first operating principle should be to deflect from agricultural lands interests which can be met on non-arable lands.
- The second operating principle should be to provide no more land than is needed to meet a person's essential goals.
- The third principle is to emphasize stewardship and wise use: conservation of the agricultural land base; and useful production on agricultural lands.

1. *Provide a land program for interests which can be satisfied on non-agricultural lands, and provide small agricultural lots if this is what is desired.* Use local area plans or resource plans to indicate where individual parcels can be provided and where subdivisions can be offered. Do not distinguish between various rural and agricultural lifestyles except when creating exclusively rural residential neighborhoods. Provide up to 20 acres at fair market value. Place no development requirements, but permit whatever agricultural activities a site can support. Tax all such lifestyle

holdings as rural residential lots. Provide Agriculture Branch extension services geared to gardening, greenhousing, and small-scale poultry and livestock raising.

2. *Provide opportunities for hobby-farms and part-time farms in planned offerings between 20 and 40 acres.* Sell at fair market value for straight cash purchase with minimum development conditions. Tax as agricultural properties on basis of demonstrated production. Tax as rural residential if there is no production. Provide programs to enable applicants to obtain conventional financing for land development.

3. *Provide large parcels (100 acres and more) to be developed into commercial farms only.* For both planned releases and spot applications (where resource planning permits) future expansion needs may be anticipated by reserving lands for a defined period. Select only applicants who have verified experience, skills, capital, and viable business intentions. It will be expected that applicants will have sufficient equity to develop the parcel on schedule. (Applicants failing to meet these criteria will be directed to Alternative 2, above.) Sale price shall be at market value (when Agreement was signed), minimum development conditions (such as clearing or game farm fencing) shall be specified. A 2-for-1 farm development assistance rebate shall be available for approved development work over and above the required minimum. Payment is due and minimum improvements shall be completed after 5 years. After payment has been made and minimum conditions met, title shall be issued.

Parcels of this size will be offered with the express objective of creating commercial farms which are demonstrably in agricultural production. Minimum production standards will be stipulated in each Agreement-for-Sale. After title has been issued, a farm which fails to meet its minimum production standard will incur a financial penalty that year based on a percentage of the farm's market value.

4. *Encourage idle or under-utilized farm land to be put into production.*

- a Tax inadequately used properties at rural residential rates, grant agricultural property rates only on basis of production values.
- b Focus Agriculture Branch extension services to the objective of getting unutilized farm lands into production. Develop a series of pro-forma business plans showing production and profit potential for various agricultural products under a variety of circumstances. Use these as education tools to induce owners to put assets to work.
- c Permit rigorously controlled subdivision of agricultural parcels to stimulate a return of idle lands to production. Subdivision will be permitted only to further the objective of increasing production, and in exchange for this privilege, reasonable production requirements will be imposed.
 - Permit the transfer of lands from one titled property to another, place production requirements on the transferred land with yearly penalties for non-compliance.

- Permit one-time subdivision into minimum 40 acre agricultural parcels. Place production requirements on each parcel, with yearly penalties for non-compliance.

5. *Revise game farming development requirements per suggestions in Section 7.4:*

- a Provide adequate amounts of class 5 and 6 lands for new applications, and provide opportunities for expansion to meet operational needs and to allow for growth.
- b Provide conditions sensible to game farming development needs. Rigorous standards on fencing and stocking, relaxed requirements to clear and seed, 10-year agreement for sale, full price due if production and stocking levels are not maintained.

6. *Collect accurate data relating to the measurement of Agriculture Policy objectives.* These would include information on Yukon agriculture, non-commercial garden production, land disposition, land uses, resource conflicts, and Agriculture Branch extension services. Compile this data in forms useful and accessible to evaluating results, publicize this information.

9.5 Concluding Remarks on Policy Recommendations

By comparing criteria and actual outcomes against the expected outcomes of the Agricultural Policy, this evaluation identified a number of issues and problems. People differ markedly on these issues and how they should be addressed. The recommendations offered in this report aim to take this range of opinions and values into account while attempting to identify solutions to problems - or at least improvements to them.

The recommendations are based on generally accepted principles: that public resources should be managed and used responsibly, that individuals should be able to realize dreams and ambitions which do not conflict unduly with public priorities, and that the public should realize benefits from the privatization of public resources.

The recommendations accept that developing a productive and profitable agriculture industry would be good for the Yukon economy. Accomplishing this should be an explicit goal - provided that environmental priorities and other social interests are maintained as well. This is obviously a balancing act. By founding a broad-based land program on locally-informed resource planning, resources and interests such as wildlife, trapping, hunting and recreation could be better recognized and protected, and land dispositions could be facilitated. It is hoped and intended that the standing and management of most interests would be improved.

By providing a broadly-conceived rural land program, it is intended that lifestyle interests would be substantially met *and* genuine agricultural development would occur. It is hoped that all resource users - farmers and non-farmers alike - can see their essential interests embedded in the suggested changes.

Contact List

Each Yukon First Nation and each Renewable Resources Council received a letter providing information about the evaluation and inviting each to contribute. A wide spectrum of stakeholder organizations also received specific invitations, and a series of newspaper advertisements invited the general public to phone, fax, e-mail or mail comments to the evaluator. Over 20 individuals and organizations responded to this advertisement by providing written or telephoned input.

Personal interviews were held with a cross-section of 26 farmers, land applicants, and interested persons across the Yukon .

Interviews were held with key personnel from relevant government agencies, and with representatives of First Nations and Renewable Resource Councils in a selection of agricultural areas.

Interviews were held with representatives of the following agencies and organizations:

- Agriculture Branch, Yukon Dept. of Renewable Resources
- Fish and Wildlife Branch, Yukon Dept. of Renewable Resources
- Policy and Planning Branch, Yukon Dept. of Renewable Resources
- Environmental Assessment Branch, Yukon Dept. of Renewable Resources
- Department of Economic Development, Yukon Government
- Department of Community and Transportation Services
- Yukon Fish and Wildlife Management Board
- Yukon Agriculture Association
- Yukon Conservation Society
- Yukon Outfitters Association
- Yukon Horseman's Association
- Yukon Game Grower's Association
- Yukon Trapper's Association
- Ta'an Kwatch'an First Nation
- Kwanlin Dun First Nation
- Champagne and Aishihik First Nations
- Nacho Nyak Dun
- Little Salmon/Carmacks First Nation
- Selkirk First Nation
- Liard First Nation
- Tr'ondek Hwech'in
- Mayo Renewable Resources Council
- Selkirk Renewable Resources Council
- Carmacks Renewable Resources Council

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