

August 23, 1994

Mr. Jean Pronovost Deputy Minister Ministère de l'Environnement et de la Faune 3900 rue de Marly 6e étage Ste-Foy, Québec G1X 4E4

Subject: Inter-Community Trade Project - Preliminary Information

Dear Deputy Minister:

As per section 23 of the James Bay and Northern Quebec Agreement and Section 190 of the Environmental Quality Act, the following is to provide you and the Kativik Environmental Quality Commission preliminary information on the Inter-Community Trade project.

As you are aware, Makivik Corporation, established by provincial legislation on June 23, 1978, is a non-profit organization that administers the compensation funds intended for the Inuit in Nunavik, as provided for in the James Bay and Northern Quebec agreement. As part of its economic development mandate, Makivik has initiated the Inter-Community Trade project - the commercialization of Nunavik country food products such as caribou and seal. The main activities within the project include - harvesting caribou and ringed seal through traditional Inuit hunts, inspection of the carcasses and processing the meat into packaged products within certified community processing centres, and finally, distributing the products. Initially the products will be distributed to the primary market, the Nunavik Region; any surplus will then be channelled into Quebec, national and international secondary markets.

At the present time there are four processing centres located in the northern villages of Quaqtaq, Kangiqsualujjuaq, Kangiqsujuaq, and Umiujaq. These community processing centres have been built, tested, and stand ready for pilot commercial operation by November of this year depending on market demand and viability. It is expected that when the Inter-Community Trade initiative has been fully implemented there will be a community processing centre in each Nunavik community. Although Makivik has initiated the project and is presently managing the operating activities through its wholly owned subsidiary company, Nunavik Arctic Foods Inc., it has done so in the name of the individual communities in which the processing centres have been built. The very nature of the initiative is very much a community based and driven development project. The Makivik resources are being utilized for the initial implementation and to resolve the start-up problems that arise. Once this has been accomplished, the Inuit management and processors trained, each individual processing centre will be transferred to ownership of the Landholding Corporation of that community. The shareholders of the Landholding Corporation are all Inuit resident of that respective community.

The recently completed *Inter-Community Trade Five- Year Business Plan* demonstrated that the project is feasible and projected to be profitable in its third year of operation. Through numerous discussions and consultation tours that took place with all the communities of Nunavik, the fundamental principle was adopted, that proper wildlife management and the preservation of the species for future generations must always take precedent over monetary issues. As a result, Makivik sponsored the establishment of local Hunting Fishing and Trapping Associations in each Nunavik community, to establish commercial hunting zones and ensure this principle of proper wildlife management at the community and regional level. Wildlife management procedures are conducted in collaboration with Makivik Corporation, the Kativik Regional Government and of course government departments both federal and provincial, with wildlife management mandates.

Over the past two years, Makivik has made a considerable investment in research studies and pilot projects with the participation of the federal and/or provincial government agencies (in particular Industry Canada, Agriculture Canada, Department of Fisheries and Oceans, Ministère de l'Agriculture, des Pêcheries et de l'Alimenation and the former Ministère du Loisir, de la Chasse et de la Pêche). These studies have been an integral part of establishing the project policies and procedures required to meet regulatory requirements, while maintaining the principles of maximum Inuit employment and wildlife management. They address the ecological, economic and social impact issues that the Inter-Community Trade initiative may have on the environment of Nunavik.

Enclosed is information on the Inter-Community Trade project which includes the following:

- Description of the Inter-Community Trade project its purpose and scope, including an update on the studies and pilot operations conducted to date.
- 2) Executive Summary of the Inter-Community Trade Five Year Business Plan
- 3) Makivik and Regional resolutions supporting the Inter-Community Trade initiative

- 4) An example of the commercial hunting zones established by the Hunting, Fishing and Trapping Association of each community
- 5) Community Processing Centre layout blue prints certified by the Ministère de l'Agriculture, des Pêcheries et de l'Alimenation
- 6) The Inter-Community Trade Quality Management Plan
- 7) Ministère de l'Environnement et de la Faune recommendation for caribou quota level

As previously stated, limited commercial activity is scheduled to begin in the four existing community processing centres in November 1994 (as detailed in the project description). The scheduled activities will be limited to a Caribou and Ringed Seal harvest in the following magnitude:

Community	Caribou	Ringed Seal
Kangiqsualujjuaq (GR)	980	(none)
Kangiqsujuaq (WB)	556	215
Quartaq	556	215
Umiujaq	556	215
TOTAL:	2,648	645

We recognize the heavy work load before the EQC and the severe time constraints. We have endeavoured to present the required information for a thorough understanding of the project. Notwithstanding our efforts, it must be remembered that the initiative is only in its initial phase of implementation and that the future phases will clearly depend on the degree of success in penetrating potential markets. The Inter-Community Trade initiative was conceived in a manner that would maximize the benefits to the Nunavik Region, namely - revenues for the communities, direct employment, positive economic spin-off effects such as the development of cottage industries for value added products, an improved dietary balance of inspected country foods for the Inuit of the region; and a reduced dependency on imported high-priced southern foods, thereby reducing the high cost of living within the region. We stand ready to initiate activities in the four community processing centres for the upcoming winter period of November 1, 1994 to March 31, 1995. Makivik Corporation is committed to this project and is very confident of the ultimate success of the project and of the important contribution that it will make to the economic development of our region.

Should you have any questions on the enclosed documents, or require additional information, both ourselves and our staff would be pleased to provide further documentation, make a presentation directly to your ministry, the KEQC and/or elaborate on any aspect of the initiative.

Thank you for your consideration. We look forward to your response.

Sincerely,

Jackie Koneak

Second Vice-President

Renewable Resource Development Dept'd

Mark T. Gordon

Third Vice-President

Economic Development Department

INTER-COMMUNITY TRADE BUSINESS PLAN

VOLUME ONE

April 1994



650 32nd Avenue Lachine, Quebec H8T 3K5 Funding for this document was obtained in part from the Aboriginal Business Development Program, Industry Canada.

This report was produced for MAKIVIK CORPORATION by ROY LGL, Ltd. The ideas, comments and recommendations in this document reflect those of its authors and do not necessarily reflect those of the Aboriginal Business Development Program.

TABLE OF CONTENTS:

EXEC	UTIVE SUMMARY:	
BUSII	NESS PLAN FOR INTER-COMMUNITY TRADE:	
	EXECUTIVE SYNOPSIS:	
	PROJECT VIABILITY:	. i
	PRINCIPLE BENEFITS:	. i
	INTER-COMMUNITY TRADE SUPPORT:	į
	INTRODUCTION:	٧
	THE ROLE OF MAKIVIK CORPORATION:	٧
	DEMAND FOR COUNTRY FOODS:	vi
	REGULATORY ISSUES:	2
	CONSERVATION MANAGEMENT:	Х
	HARVESTING:	Х
	COMMUNITY PROCESSING CENTRES:	X
	REGIONAL MARSHALLING FACILITY:	χi
	TRAINING REQUIREMENTS:	χi
	FUNDING REQUIREMENTS:	X
	PROOF OF CONCEPT:	χV
	ION ONE: INTRODUCTION TO INTER-COMMUNITY TRADE: HISTORY and BACKGROUND: INTER-COMMUNITY TRADE, THE INITIAL CONCEPTS: OPEN FORUMS ON INTER-COMMUNITY TRADE: MAKIVIK CORPORATION and ITS 1992 EXECUTIVE SUMMARY ON INTER-COMMUNITY TRADE: PILOT PROCESSING FACILITIES:	2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
SECT	ION TWO: PRIORITIES AND POLICIES:	13
	INTRODUCTION:	13
		14
	CREATION OF EMPLOYMENT POLICY:	14
	EQUAL EMPLOYMENT ACCESS POLICY:	14
	MAXIMUM VALUE ADDED POLICY:	15
	AVAILABILITY OF COUNTRY FOODS POLICY:	16
	ASSISTANCE TO ENTREPRENEURS POLICY:	17
	FOR THE GENERAL BENEFIT OF THE POPULATION POLICY:	18
	PROVISION FOR EXISTING ENTREPRENEURS POLICY:	18
	SELF-SUFFICIENCY POLICIES:	19

SUBSIDIZATION OF COUNTRY FOODS POLICY:	19 20 21 25 25
PART TWO: REGULATORY CONSIDERATIONS:	27
INTRODUCTION:	28 28 28
SECTION FOUR: QUOTAS FOR COUNTRY FOODS: INTRODUCTION:	32 32 32 33
SECTION FIVE: INSPECTION AND CERTIFICATION:	43 43
INTRODUCTION. INSPECTION, CERTIFICATION and THE JAMES BAY and NORTHERN QUÉBEC AGREEMENT: FOOD INSPECTION, THE PROCESS: FACILITY CERTIFICATION: EVALUATION OF SIMILAR INSPECTION TECHNIQUES:	43 44 47 47
SECTION SIX: MONITORING OF WILDLIFE SPECIES: INTRODUCTION:	49 49 49 50
PART THREE: HARVESTING AND PROCESSING ALTERNATIVES:	52
SECTION SEVEN: HARVESTING METHODS AND PRACTICES: INTRODUCTION: HARVEST METHODOLOGIES - CARIBOU: HARVEST METHODOLOGIES - SEAL ABILITY OF THE HUNTING FISHING AND TRAPPING ASSOCIATION TO SUPPLY THE COUNTRY FOODS:	53 56
SECTION EIGHT: PROCESSING METHODS AND PRACTICES FOR SEAL AND CARIBOU:	6

PROCESSING CARIBOU:	6
PROCESSING SEAL:	6'
PRODUCT AND PACKAGING PREFERENCES:	61
QUALITY MANAGEMENT PLAN:	6/
PROCESSING OF COUNTRY FOOD BY-PRODUCTS:	6/
EVALUATION OF SIMILAR PROCESSING TECHNIQUES:	68
PART FOUR:	
MARKET POTENTIAL:	66
SECTION NINE: MARKET REVIEW:	67
INTRODUCTION:	67
MARKETING OF SEAL:	67
MARKETING OF CARIBOU:	71
THE INUIT MARKET:	72
THE NON-BENEFICIARY MARKET:	72
THE EXPORT MARKET:	72
PUBLIC OPINION OUTSIDE OF NUNAVIK:	73
SECTION TEN: PROMOTION OF COUNTRY FOODS:	75
INTRODUCTION	75 75
PROMOTION STRATEGY:	75
PART FIVE:	
ANALYSIS OF OPTIONS:	77
SECTION ELEVEN: PLANT AND FACILITIES:	
INTRODUCTION:	78
INTRODUCTION:	78
HANDLING AND PROCESSING OPTIONS: OPTION 1: HANDLING FACILITIES AND REGIONAL PROCESSING	78
FACILITIES:	78
OPTION 2: THREE REGIONAL FACILITIES:	80
WITH A CENTRAL REGIONAL MARSHALLING FACILITY:	81
RECOMMENDED OPTION:	82
PLANT SIZES AND GENERAL LAYOUT:	83
COMMUNITY FREEZERS:	83
SECTION TWELVE: REGIONAL MARSHALLING FACILITY:	85
INTRODUCTION:	85
REGIONAL MARSHALLING FACILITY, THE PURPOSE: TRAINING:	85
	86

REGULATORY AGENCIES: QUALITY MANAGEMENT PLAN: MARKETING AND DISTRIBUTION EXPERTISE: SUMMARY:	87 88
SECTION THIRTEEN: TRAINING, THE ULTIMATE PRIORITY: INTRODUCTION: HUNTER INSPECTION CERTIFICATION COURSE: MEAT PROCESSING EMPLOYEE TRAINING COURSE: TRAINING COMMUNITY PROCESSING CENTRE MANAGERS: INSPECTOR TRAINING: TRAINING COSTS:	90 90 91 91
SECTION FOURTEEN: MONITORING AND INFORMATION MANAGEMENT	
SYSTEM:	. 94 . 94
INTRODUCTION: ORGANIZATION AND OWNERSHIP: OWNERSHIP STRUCTURE: MANAGEMENT STRUCTURE: BOARD OF DIRECTORS: CORPORATE MANAGEMENT AND THE REGIONAL MARSHALLING CENTRE: BOARD OF ELDERS: ADVISORY COMMITTEE: DECISION MAKING PROCESS and CORPORATE MANAGEMENT'S AUTHORITY: REGULATORY AGENCIES: HUNTING, FISHING AND TRAPPING ASSOCIATION:	. 96 . 97 . 98 . 98 . 99 . 102 . 102 . 103 . 104
PART SIX: PROJECT FINANCIAL VIABILITY:	. 106
SECTION SIXTEEN: PROJECT FINANCIAL VIABILITY: INTRODUCTION: METHODOLOGY: ACCOUNTING PRACTICES: OPERATING EXPENSES: CAPITAL COSTS: PRODUCTION THROUGHPUT VARIABLES: WHOLESALE PRICING STRUCTURE:	107 107 107 108 109

	SENSITIVITY ANALYSIS FACTORS: FINANCIAL VIABILITY ANALYSIS:				
	SEVEN: LUSIONS AND RECOMMENDATIONS:	 	 	 	 131
SECT	ON SEVENTEEN: CONCLUSIONS:	 	 	 	 132
SECT	ON EIGHTEEN: RECOMMENDATIONS:	 	 	 	 134
ANNE	X A: IMPLEMENTATION PLAN:	 	 	 	 136
ANNE	X B: BIBLIOGRAPHY:	 	 	 	 138

EXECUTIVE SUMMARY:

BUSINESS PLAN FOR INTER-COMMUNITY TRADE:



Figure 1: A project for the people.

- Inter-Community Trade is a social, cultural and economic development initiative by the Inuit of Nunavik. Wildlife such as caribou, ringed seals and fish will be harvested by Inuit hunters using traditional practices. The harvested product will be inspected by government agencies and then processed for sale to Inuit and non-Inuit.
- The Inter-Community Trade project will have positive impact in all 14 communities as well as creating more than 300 seasonal harvesting and processing jobs; and 125 to 150 jobs in new and existing secondary industries.

CONCLUSION

The Inter-Community Project is financially viable, will create employment, will provide quality inspected foods at reasonable prices, and will provide economic incentive to the Nunavik region.

Inter-Community Trade is essential to the health, well being, and dignity of the Inuit population and must be a top priority of the Federal and Québec governments, and the Makivik Corporation.

RECOMMENDATIONS:

- 1. The Inter-Community Trade Project should be implemented in its entirety.
- 2. Funding assistance must be sought from the Federal and Québec governments.

PROJECT VIABILITY:

- Once the capital cost requirements have been funded, the Inter-Community Trade initiative is viable. Portions of profits and revenues generated by the Inter-Community Trade initiative will be available to:
 - 1.1 Create a financial capital reserve to expand existing facilities, and replace capital equipment;
 - 1.2 Invest in the development of additional value-added products, produced from country food by-products; and
 - 1.3 Provide the community with much needed revenues, additional job creation, investment opportunities and resources for ongoing training requirements.

PRINCIPLE BENEFITS:

- The Inter-Community Trade initiative, will positively affect 14 Nunavik communities, and provide the backbone infrastructure needed to derive the following principle benefits:
 - 2.1 A reduction in unemployment levels, with a corresponding increase in labour skills, through:
 - 2.1.1 The creation of 300 seasonal harvesting and processing jobs; and

- 2.1.2 The generation of 125 to 150 jobs in new and existing secondary industries.
- 2.2 Inspection of country foods and improved quality of life through associated health benefits;
- 2.3 Establishment of improved conservation management practices of Nunavik wildlife;
- 2.4 Promotion of employment in areas of cultural importance;
- 2.5 The provision of inspected country foods, at prices affordable to the targeted market, using local natural resources; and
- 2.6 Respect for, and a recognition of, Inuit culture and values.

INTER-COMMUNITY TRADE SUPPORT:

- 3 The Inter-Community Trade initiative has the support of:
 - 3.1 The Nunavik population as it meets the two regional sensitivities of: (i) the proper conservation management of wildlife species; and (ii) the creation of employment, for the Inuit.
 - 3.2 Makivik Corporation has placed the Inter-community Trade project among its highest priorities;
 - 3.3 The Québec government is supportive of all wildlife harvest quota levels as well as, inspection and certification adjustments required for the project; and
 - 3.4 The Federal government is equally supportive of the project and its socio-economic benefits.

SEASONAL JOBS CREATED HUNTERS AND PROCESSORS

Previous	Year 1 94-95	Year 2 95-96	Year 3 96-97	Year 4 97-98	Year 5 98-99	Total
0	50	50	50	75	75	300

April 1994 Final Report Page iv

SECONDARY JOBS CREATED

Previous	Year 1 94-95	Year 2 95-96	Year 3 96-97	Year 4 97-98	Year 5 98-99	Total
0	0	20	20	35	50	125

FINANCIAL DISBURSEMENTS PROFILE. (Figures Shown in 000s)

evious TMENT	Year 1 94-95	Year 2 95-96	Year 3 96-97	Year 4 97-98	Year 5 98-99	TOTAL
0						<u> </u>
	873					
es sign		1,616	1,715	980	453	\$ 5,637
0	873	1,617	1,716	979	453	\$ 5,638
0	572	576	580	584	191	\$ 2,503
1,438		0	0	0	0	\$ 1,438
1,438	\$ 2,318	\$ 3,809	\$ 4,011	\$ 2,543	\$ 1,097	\$ 15,216
RIDGE	FINANCIN	G COSTS				
1,500	700	700	800	900	900	\$ 5,500
2,938	\$ 3,018	\$ 4,509	\$ 4,811	\$ 3,443	\$ 1,997	\$ 20,716
	1,500 2,938	1,500 700 2,938 \$ 3,018	### SRIDGE FINANCING COSTS 1,500	### Page 1	BRIDGE FINANCING COSTS 1,500 700 700 800 900 2,938 \$ 3,018 \$ 4,509 \$ 4,811 \$ 3,443	BRIDGE FINANCING COSTS 1,500 700 700 800 900 900 2,938 \$ 3,018 \$ 4,509 \$ 4,811 \$ 3,443 \$ 1,997

² FORD

Industry Canada, Canadian Aboriginal Economic Development Strategy.

Industry Canada. Federal Office for Regional Development (Quebec). The amount of \$1,438,000 spent in previous years by Makivik includes the

existing processing facilities, equipment, and related items.

EXECUTIVE SUMMARY:

INTRODUCTION:

- The Inuit of Nunavik have hunted, fished and trapped various wildlife species for countless generations. Whether the wildlife be: (i) marine mammals, such as seals and whales; (ii) land animals, such as caribou and Arctic fox; (iii) fish, such as salmon, char and trout; or (iv) birds such as geese and ptarmigan, wildlife have remained as the staple of existence for the Inuit of Nunavik. In addition, the lack of vegetables and fruit, in the harsh Nunavik climate has resulted in the Inuit becoming almost uniquely dependent upon the flesh of country foods.
- Nunavik citizens are concerned about their culture and traditions. The values and norms associated with the new way of life, within communities, is at odds with what has been previously understood and accepted by the Inuit population. Important values, such as the sharing of food and the role of elders within the village are being challenged, and sometimes lost. The youth no longer see their future within traditional trades such as hunting, fishing and trapping.
- Today, traditional existence has been replaced with small communities, in fourteen isolated coastal villages. The resulting concentration of many people within the confines of a village has distressed some local wildlife species, making these species less abundant within the immediate periphery of the village. This has resulted in hunting expeditions of greater cost, duration and distance, to a point where many Inuit can no longer afford to hunt for themselves.
- The increasing costs associated with hunting has resulted in the increased consumption of some imported foods. Imports, such as vegetables and fruits, are seen as positive benefits because of the nutritional value they introduce into the local diet. Others such as beef, pork and poultry are seen as replacements for country foods, are exceptionally expensive, and are helping diminish the cultural values associated with hunting, fishing and trapping of various wildlife species.
- The Nunavik region must also deal with a high cost of living. Currently, unemployment in the Nunavik region stands at 3 to 5 times the National average of 10-12%. As well, if one desired to bring northern living standards in line with the south, it would require an effective minimum wage significantly higher than the southern minimum wage. The Nunavik region cannot afford, nor does it wish, to maintain the status quo. To overcome this dilemma requires immediate job creation, and the development of community based infrastructure, while respecting the sensitivities of the Inuit.

THE ROLE OF MAKIVIK CORPORATION:

- To address these regional issues, Makivik Corporation is putting forth, as a top priority, the Inter-Community Trade initiative, on behalf of the Inuit population of Nunavik. Inter-Community Trade is a socio-economic project which has the following two key sensitivities, each focused on traditional Inuit values:
 - 6.1 The proper conservation management of wildlife species, and
 - 6.2 The creation of employment, for the Inuit population of Nunavik.

- The Inter-Community Trade initiative is a significant step forward for the Inuit of Nunavik. It assists them in attaining a quality of life, comparable to those living in the south, while allowing the Inuit to preserve and participate in their culture and traditions.
- In the Inuit language "makivik" means advancement. It is a fitting name for an organization whose main goal is to help develop not only the Inuit economy, but the social and political landscapes as well. A non-profit, Inuit owned development corporation, Makivik Corporation was created to manage the compensation monies received from the James Bay and Northern Québec Agreement. The agreement contains 31 sections providing Inuit with special rights of: (i) land ownership and use; (ii) hunting, fishing and trapping rights; (iii) environmental protection; (iv) monetary compensation; and (v) certain regional government powers, in exchange for the surrender of their aboriginal claims in Québec.
- 9 Economic factors have impacted Makivik Corporation directly as lower interest rates have reduced the income earned from Makivik Corporation's investments. This has resulted in less revenue within Makivik being available for economic development initiatives. In addition, both the Federal and Provincial governments have undertaken major cost cutting programs, resulting in smaller program assistance budgets.
- 10 With respect to socio-economic development, Makivik Corporation has initiated and encouraged extensive public dialogue on how the Inter-Community Trade project should be established and operated. A consensus, embraced by the Inuit population has emerged, with the following principles and policies:
 - 10.1 Wildlife species belong to, and are shared by, all Inuit. Therefore, the Inuit population as a whole must benefit from the Inter-Community Trade project;
 - 10.2 Wildlife species must be conserved for future generations;
 - 10.3 Government food inspection is required to prevent contaminated wildlife from being processed and sold; therefore rigorous inspection processes are essential;
 - 10.4 Inter-Community Trade must encourage and assist country food entrepreneurs, not compete with existing entrepreneurs and retailers;
 - 10.5 The creation of jobs in Nunavik appropriate for the Inuit population, and its youth, is crucial; and
 - 10.6 Employment must be created in all 14 communities. This implies that quotas must be distributed in a fair and equitable manner to ensure each plant is profitable.
- 11 In recognition of these factors Makivik Corporation, in conjunction with other Inuit and government organizations, has come to the following realizations:
 - 11.1 The only commercially renewable resource in Nunavik is the local wildlife species which must be used for socio-economic development. Makivik and the regulatory agencies must work together to ensure the application of appropriate resource management and conservation techniques to guarantee sustainable wildlife populations;

- 11.2 The cost of imported foods from southern Canada is unacceptably high. Country foods must be available at lower prices than imported foods, thereby helping to reduce somewhat the high cost of living in the North;
- 11.3 Many of the unemployed are excellent hunters. The implementation of the Inter-Community Trade initiative would provide about 300 seasonal jobs, in the harvest and processing of country foods, and as many as 125 to 150 more jobs in secondary and related industries; and
- 11.4 Ministère de l'Agriculture, des Pêcheries et de l'Alimentation has to provide country food inspection services to substantially reduce sickness and death caused by contaminated country foods.

DEMAND FOR COUNTRY FOODS:

- The commercial expectations of the Inter-Community Trade initiative are to first satisfy the demand for country foods in Nunavik, and then, to initiate the export of surplus country foods, outside of the Nunavik region.
- The demand for country foods in Nunavik has thus been established and addressed according to the following priorities:
 - 13.1 The sale of country foods to beneficiaries of the James Bay and Northern Québec Agreement;
 - 13.2 The sale of country foods to non-beneficiaries of the James Bay and Northern Québec Agreement residing in Nunavik; and
 - 13.3 The potential sale of some country foods to consumers residing outside of Nunavik.
- The Inter-Community Trade Initiative must assist all 14 communities with the marketing of country foods, and the coordination and distribution of surplus foods to needy communities. To best use limited resources, keep project costs within acceptable levels, and have an overall view of the country food demand and surplus requirements, it will be necessary to provide a centralized coordination effort, one of the primary activities of the Regional Marshalling Facility. ¹
- Individuals who comprehend the regional sensitivities of the North, and how small villages work and communicate, will realize that the promotion of country foods, within the Inuit villages of Nunavik, will be substantially different from southern methods. Promotion and product testing are two very important aspects of product management. Makivik Corporation is undertaking, during the coming months, a series of market tests in four Nunavik communities. These tests will be used to measure consumer taste and format preferences for seal and caribou, as well as lake trout and whitefish. The results of these tests will provide a good basis for the processing of seal and caribou

April 1994

The Regional Marshalling Facility provides centralized management, sales, marketing, quality control and warehousing facilities. Refer to Section Twelve of this report for details.

as well as providing additional direction with respect as to how Inter-Community Trade should address the possible commercialization of lake trout and whitefish.

- In addition, the marketing of country foods has been addressed a number of times of during the last few years. The most notable of these reviews and surveys have been:
 - 16.1 Public forums on Inter-Community Trade and country foods conducted by Makivik Corporation throughout 1991 and 1992;
 - 16.2 Marketing Study Relating To Inter-Community Trade prepared by David Barrett in March of 1992;
 - 16.3 Marketing Caribou Meat From Nouveau-Québec produced by the Ministère du Loisir, de la Chasse et de la Pêche in 1984; and
 - 16.4 Feasibility Study For The Re-Establishment Of The Seal Fishery In Northern Québec prepared by SINAQ Enterprises Inc. in April of 1992.
- Non-beneficiaries residing in Nunavik are presently not allowed to buy country foods commercialized by the Inuit. Many non-beneficiaries currently sport hunt caribou and have acquired a taste for caribou. The public forums on Inter-Community Trade and country foods conducted by Makivik Corporation throughout 1991 and 1992 fully demonstrated that there is a strong demand by non-beneficiaries, in Nunavik, for processed and commercialized caribou meat.
- A number of marketing studies have been done for caribou. With respect to the sale of caribou meat to beneficiaries, the Marketing Study Relating To Inter-Community Trade prepared by David Barrett in March of 1992 and the public forums on Inter-Community Trade and country foods conducted by Makivik Corporation throughout 1991 and 1992 amply support the position that there is an Inuit market for caribou meat. Preliminary results of the marketing and taste tests, currently underway, demonstrate that there is an Inuit market for country foods with price being the prime elasticity factor of demand.
- In support of these studies it is important to recognize that if only 5,000 caribou, half of the current annual quota, were to be exported to Québec, it would represent less than 0.0062 % of the beef consumed in Québec, and only 0.0027 % of all the meat, poultry and fish. In other words, only 1% of the Québec population would have eaten Caribou meat once during the year.
- The strong demand exhibited for caribou meat clearly demonstrates the potential for export sales. During the third or fourth year of operation, the Inter-Community Trade project will likely attain a production level that exceeds the Inuit's consumption and demand requirements. At this point, Inter-Community Trade will commence exporting caribou outside of Nunavik.
- The Ministère de Loisirs, Chasse et Pêche and other Québec government departments have presented a document to the Québec cabinet which seeks approval for the sale of caribou to non-beneficiaries of the James Bay and Northern Québec Agreement. All indications show that this should be approved before the end of the current calendar year.

REGULATORY ISSUES:

- The James Bay and Northern Québec Agreement allows for the commercialization of country foods, between Inuit, without Federal and Provincial regulatory involvement. The sale of country foods to non-beneficiaries of the James Bay and Northern Québec Agreement residing in Québec will require adherence to the province of Québec's food inspection requirements. The sale of food outside of Québec requires the adherence to Federal food inspection regulations. In all cases, facilities operating in Québec must be certified and inspected by Ministère de l'Agriculture, des Pêcheries et de l'Alimenation. If country foods are to be exported outside of the province of Québec, there is a requirement for the facilities to be certified both provincially and federally.
- The food processing industry is heavily regulated by both the Federal and Québec governments. For example, the allocation of quotas for the commercial harvest and processing of wildlife is one area that sees divided jurisdictions. While federal agencies allocate some harvest levels, the Québec government allocates others. There are also a large number of government regulations that apply to inspection and certification within the Community Processing Centres and the Regional Marshalling Facility. In summary, both the Federal and Québec governments provide many of the same inspection and certification services, and in some instances, approval must be sought from both.
- Inspection is the process whereby certified inspectors, often veterinarians, and historically employees of either the Federal or Québec Provincial government, examine food to determine its fitness for human consumption. The inspectors look for a variety of possible infections, illnesses, parasites, and abnormalities, to prevent unfit foods from reaching the consumers table.
- Essential to the overall health and well being of the Inuit population is: (i) the inspection of country foods; in conjunction with (ii) the certification of all processing facilities, and (iii) certified-safe processing and handling practices.
- Extensive discussions have been held with the various regulatory agencies, with respect to inspection and certification requirements, as well as training and financial assistance. Additional specific assistance required from the government of Québec is summarized as follows:
 - A change in current regulations to allow Inuit to commercialize and sell country foods to non-beneficiaries of the James Bay and Northern Québec Agreement;
 - Approval of the discussed adaptations and changes of Ministère de l'Agriculture, des Pêcheries et de l'Alimenation's inspection regulations to allow for a traditional hunt of Nunavik's wildlife species;
 - 26.3 Provision of country food inspection services (by existing inspectors) in Nunavik until Ministre de l'Agriculture, des Pêcheries et de l'Alimenation can train and employ Inuit inspectors;
 - Assist and finance the training of Inuit food processing employees as well as the hunters with respect to inspection requirements and practices; and
 - 26.5 Assist and finance the gathering of country food harvest information so that the conservation and management of the different wildlife species is assured.

The province of Québec and the Federal government are currently working together to produce a common set of inspection and certification regulations and to share in the inspection and certification services that must be provided to the processing facilities. In the future, this might mean that one inspector may work on behalf of both Provincial and Federal governments.

CONSERVATION MANAGEMENT:

- There is an overwhelming consensus, within the Inuit population, that conservation and management principles must be applied to ensure the long term viability and subsistence of all wildlife species. It is generally agreed that a combination of traditional Inuit skills, intimate knowledge of the land, and scientific practices and techniques of the south, will form the best basis for the long term management and conservation of the various country food species.
- Monitoring is that part of the conservation management process which tracks and measures the harvest of wildlife species. Monitoring is accepted, by the Inuit, as part of the conservation and management practices that must be established to ensure the long term subsistence of all country foods. Given the conservative nature of some regulatory agencies, in the allocation of quotas, monitoring will provide the information needed to negotiate appropriate quotas, and to better participate in conservation management practices.
- Discussions have been held with Ministère de Loisirs, Chasse et Pêche and the Department of Fisheries and Oceans to identify wildlife harvest levels and conservation practices. The Hunting, Fishing and Trapping Association have actively participated in the conservation management process by identifying zones which will be restricted to the subsistence hunters harvesting of wildlife. Other zones have been identified for the commercial harvest, as well as sport hunters.
- It was decided that Inter-Community Trade would initially concentrate on the commercialization of caribou and ringed seal. At a later date, and after appropriate studies and analysis, other wildlife species such as lake trout and whitefish may be added to the list of commercialized products. Some wildlife species, such as Beluga whales were identified as protected species and will not be commercialized.

HARVESTING:

As previously identified, one of the two prime objectives of the Inter-Community Trade initiative is to organize its operations so that a maximum number of Inuit can earn a meaningful income. This employment objective, in conjunction with conservation management and regulatory concerns, constitute the over-riding principles in the selection of appropriate harvesting methods.

The Hunting Fishing and Trapping Association (HFTA) is an association working on conservation management issues as well as on behalf of the Inuit hunters, fishermen and trappers addressing items such as hunter safety, financial assistance, and other concerns. There is an HFTA for each of the 14 communities and there is a regional HFTA which represents all communities.

In selecting harvesting methods, representatives of the Hunting, Fishing and Trapping Association, as well as other acknowledged experts in the harvest and processing of caribou and seals were consulted. The purpose of this effort was to ensure appropriate harvesting methodologies were selected. In addition, attention was focused on (i) the cost per pound of delivered country foods, (ii) the applicability of traditional hunting processes, (iii) capital investment by the individual hunters, (iv) the hunter's safety; and (v) the quality of the harvested food. Meetings were also held with Ministère de l'Agriculture, des Pêcheries et de l'Alimenation, and the Department of Fisheries and Oceans officials to identify how traditional Inuit hunting practices could be combined with appropriate conservation and inspection requirements.

COMMUNITY PROCESSING CENTRES:

- In 1992, at Makivik Corporation's request, three pilot facilities were constructed in Umiujaq, Quaqtaq and Kangirsualujjuaq. These structures, complete with processing areas, coolers, freezers and office space are about 210 sq. meters. While small in comparison to most southern facilities, they are adequate for the forecasted production levels.
- It is planned that within the next five years there will be processing facilities constructed in all 14 communities, thereby ensuring balanced employment throughout the region. Each community will be involved in the management and operation of their own facility. Through the Community Processing Centres:
 - 35.1 The project will provide the desired level of employment; with approximately eighty percent (80%) of all operating costs going towards the payment of Inuit hunters and food processors;
 - 35.2 The price of country foods will be substantially lower than imported country food equivalents;
 - 35.3 The inspection of country foods will solve many of the health problems currently identified; and
 - There will be jobs available for the youth of Nunavik, jobs that make use of their skills, education and cultural strengths.

REGIONAL MARSHALLING FACILITY:

- The concept of the Regional Marshalling Facility is more than just a large warehouse used to store and distribute country foods. The facility will also provide many support and coordination functions including: technical and corporate management expertise, distribution, marketing, sales, quality control, and audit functions, to the 14 Community Processing Facilities.
- 37 Discussions with Inuit organizations and government officials resulted in a consensus that a central Regional Marshalling Facility is essential to the success of the Inter-Community Trade initiative, for the following reasons:

- 37.1 The duplication of the services to be provided by the regional marshalling centre in each of the 14 Community Processing Centres would be prohibitively expensive;
- 37.2 The services provided by the Regional Marshalling Facility are not required on a full time basis in each of the Community Processing Centres;
- 37.3 The coordination required to move surplus country foods between villages (at the lowest per kilogram cost) requires a centralized function;
- 37.4 The gathering and coordination of all harvest monitoring information should be centralized to optimize the limited technical and scientific resources available in each community;
- 37.5 A coordinated service will affect the greatest savings when buying bulk processing supplies and obtaining quality services;
- 37.6 A single voice that represents all Community Processing Centres is stronger than 14 independent voices; and
- 37.7 A uniform standard for country foods must be established so that consumers are assured they only purchase products of high quality and value.
- It is also important to note that both Federal and Provincial regulatory agencies have stressed the need for a centralized Regional Marshalling Facility, to ensure quality control and public safety requirements are met. The savings and benefits that will accrue through a Regional Marshalling Facility are:
 - 38.1 The cost of technical expertise will be about twenty five person years less for a total annual savings of about \$1.8 million, over a five year period; ³
 - 38.2 Increased effectiveness in dealing with regulatory agencies;
 - 38.3 Lower operating costs through the centralized procurement of supplies and spare parts. Savings are estimated to be \$20,000 per facility for a total annual savings of about \$280,000 per year;
 - 38.4 Lower cost of country foods through controlled inventory and transportation management, about \$0.80 per kilogram less; 4 and
 - 38.5 A financially viable export market achieved through centralized marshalling and sales operations within the Regional Marshalling Facility.
- The information management system, contained within the Regional Marshalling Facility, must be fully integrated to ensure sophisticated information requirements are met. The system should

³ Section Twelve of the report provides more detail.

⁴ Section Twelve of the report provides more detail.

function in a distributed open systems environment, and be accessible through a common user interface. The most important element in this information system will be the ability of the Community Processing Centres to provide accurate information to the Regional Marshalling Facility. These include:

- 39.1 Project Planning and Management: This system must forecast planned activities as well as the costs associated with each.
- 39.2 Inventory System: This system, tied to the monitoring system, must provide country food inventory information within each village. This is also tied to the community hunter pay system.
- 39.3 Natural Resource Database: This database must store wildlife species data collected, and allow for information to be analyzed by resource specialists.
- Transportation Versus Storage Model: Some country food will be immediately consumed in the villages; some will be frozen for future consumption; and some will be shipped to other communities for their consumption or export elsewhere. There is a requirement for a computer based model which, when connected to the inventory system in each village, is capable of identifying the most economical cost options within each village and for the project as a whole.
- 39.5 Accounting and Administration: An accounting system is required which: (i) works within the operational requirements of the Inter-Community Trade initiative; (ii) provides real-time information; and (iii) provides the ability for financial and operational audits; and
- 39.6 Financial Management: This part of the system must provide management with timely and accurate information to enable proper financial management of the project.
- At this time, Kujjuuaq seems to be the ideal location for the construction of a Regional Marshalling Facility because: (i) it is a major transportation node, relative to the other communities; (ii) it is farther south than most communities; and (iii) it has a landing strip capable of handling large jets. However, it is recommended that the site for the Regional Marshalling Facility not be selected for a year or two in order to acquire a better understanding of the project's logistics requirements.

TRAINING REQUIREMENTS:

- As with any business enterprise, Inter-Community Trade must ensure product consistency, and quality control. The best way this can be achieved is through a centrally managed training system. The Regional Marshalling Facility team will ensure that appropriate training programs are developed to support and serve Inter-Community Trade's needs. By developing a training program, and ensuring that it is consistently applied in all of the communities, the hunters and processing centre employees will all have a common base of knowledge.
- To achieve success training costs must be acknowledged and budgeted, and training plans developed and implemented. Professional trainers must develop detailed course curriculum and ensure that the emphasis is hands on and applicable to the job at hand. Training must be reviewed

April 1994 Final Report Page xiv

on an ongoing basis so as to be able to implement change, and improvement, as the need is identified.

- The training requirements for this project are substantial, with about 300 people requiring training at all levels of the project. For example, the food processors, the Community Processing Centre managers, the hunters and the food inspectors will all require a variety of training programs.
- The training programs must be developed in conjunction with the Community Processing Centres, as well as, the Ministère de l'Agriculture, des Pêcheries et de l'Alimenation and the Department of Fisheries and Oceans. The training must reflect the needs and requirements of the project and the regulatory environment within which the project must operate. Inter-Community Trade must work with: (i) the provincial and federal training organizations; (ii) Makivik Corporation's training group; (iii) the adult education section of the Kativik School Board which has an important training mandate in Nunavik; and (iv) the Kativik Regional Government, which has major areas of responsibility that impact directly on the training requirements of the Inter-Community Trade Initiative. Equally important to initial employee training is the consistency of continuing on-the-job training.

FUNDING REQUIREMENTS:

- Capital costs for the project are estimated at \$16.8 million. This includes funding provision for:
 (i) the 14 Community Processing Centres; (ii) the Regional Marshalling Facility; (iii) the necessary equipment to satisfy production requirements; (iv) and the capital training costs to ensure the skills requirements.
- In support of the Inter-Community Trade initiative Makivik Corporation has already invested \$3.0 million, almost 25% of projected capital facilities costs, towards the construction of the four initial community facilities. To fund the remaining 75% of capital costs, Makivik Corporation will be approaching Industry and Science Canada for assistance through the Canadian Aboriginal Economic Development Strategy and the Federal Office of Regional Development.
- In addition to the capital funding requirements. Makivik Corporation will:
 - 47.1 Allocate an additional \$7.0 million, for bridge financing, the interest costs associated with bridge financing, sunken inventory costs and inventory cash flow.
 - 47.2 Approach the province of Québec for \$2.8 million dollars in capital training assistance. This money will be used to offset the costs associated with ensuring hunters, meat processors, and plant managers meet the initial skill requirements of the project.
 - 47.3 Request \$1.3 million in funding assistance, through the Federal Office of Regional Development, to help defray the costs associated with creating the project implementation team.
 - 47.4 Fund ongoing training of existing employees will be handled through operating revenues of the Community Processing Centres.

FIVE YEAR FUNDING REQUIREMENT. (MILLIONS OF DOLLARS)

	Financier	Amount	Totals
Construction of 14 Processing Centres and Regional Marshalling Facility	Makivik ISC	3.0 10.8	\$13.8
Capital Training Other Training	MAPAQ	2.8	\$ 2.8
Project Implementation	ISC Makivik	1.3 1.5	\$ 2.8
Bridge Financing and sunk inventory costs	Makivik	5.5	\$ 5.5
Total Budget :	<u>\$24.9</u>		

PROOF OF CONCEPT:

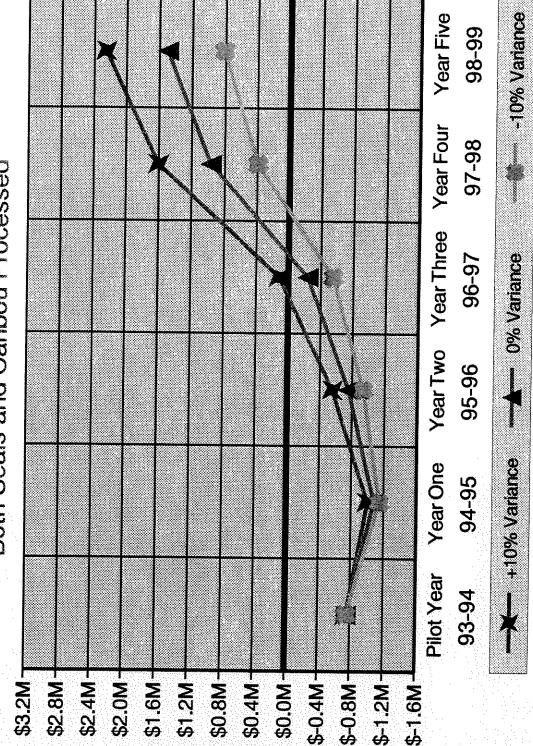
- "Project Financial Viability" is defined as the ability to generate sufficient funds to: (i) pay all operating and related expenses; and (ii) to place money into a capital reserve fund to maintain and upgrade capital facilities and equipment. Project financial viability is generally determined by examining pro-forma income statements for a five year period so as to determine the long-term income trends of the Inter-Community Trade project.
- The financial viability of the project has been computed and subjected to extensive sensitivity analysis. From this analysis it is evident that the project is financially viable and self sufficient if funding assistance is received from both the Federal and Québec governments, for the initial capital costs. The two charts on the following pages summarize the financial analysis.

- 49.1 <u>Summary Income Statement:</u> This chart shows the forecasted income for the Inter-Community Trade project. Depicted are three income curves, showing the sensitivity analysis variances of: (i) +10%; (ii) 0%; and (iii) 10%.
- 49.2 <u>Summary Cumulative Income Statement:</u> This chart shows the forecasted cumulative income for the Inter-Community Trade project:
 - 49.2.1 The top curve shows cumulative income with capital funding received from the Federal and Québec governments; ⁵ and
 - 49.2.2 The bottom curve shows cumulative income if capital funding assistance is not received.

⁵ Volume Two of this report provides the detailed information.

Income With Capital Funding Assistance (Before taxes) Summary Income Statement

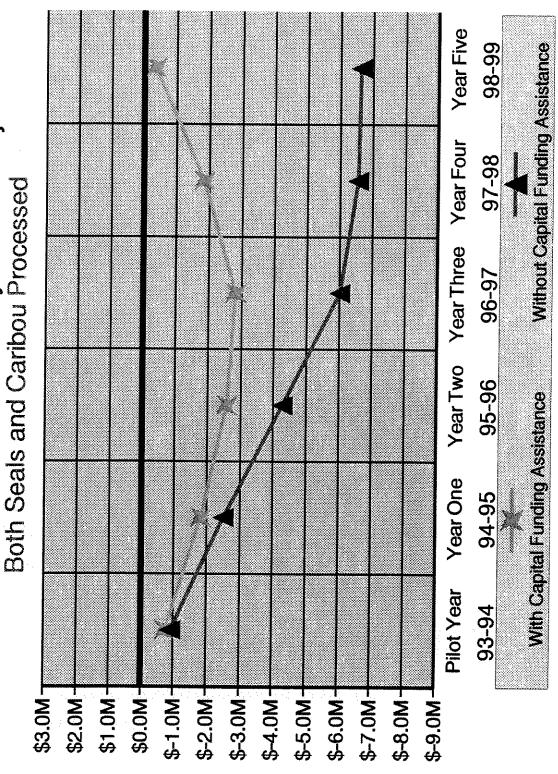
Complete Inter-Community Trade Project Both Seals and Caribou Processed



Summary Cumulative Income Statement

0% Variance (Before taxes)

Complete Inter-Community Trade Project



PART ONE:

BACKGROUND AND PRIORITIES:

SECTION ONE: SECTION TWO:

INTRODUCTION TO INTER-COMMUNITY TRADE:

PRIORITIES AND PRINCIPLES:



Figure 2: Ice fishing with nets.

SECTION ONE:

INTRODUCTION TO INTER-COMMUNITY TRADE:

HISTORY and BACKGROUND:

- The Inuit ⁶ of Nunavik ⁷ have hunted, fished and trapped for country foods for countless generations. Country foods, whether it be derived from (i) marine mammals, such as seals and whales; or (ii) land animals such as caribou and arctic fox; or (iii) fish such as salmon, char and trout; or (iv) birds such as geese and ptarmigan, have all been the staple of existence for the Inuit. The lack of vegetables and fruit, in the harsh northern climate of Nunavik, has resulted in the Inuit becoming almost uniquely dependent upon the flesh of various wild life species.
- The traditional way of life for the Inuit, prior to the 1940s, was that of a nomadic existence. Small groups of one or more families would follow the migrations of the different species of country foods. The existence of these small units was dependent upon the skill of the hunters and an intimate knowledge of the migration patterns of the various wildlife species.
- The subsistence of the family units was often dependent upon the sharing of food. All hunters were not equally successful, country foods were not always abundant and equally distributed, and in some years the country foods did not follow their traditional migratory patterns. Inuit society has placed a high value on their hunters and the elders. It is these individuals who have the experience and knowledge, of the land, needed to teach the young how to hunt and survive.
- During the last fifty years the Inuit way of life in Nunavik has seen dramatic changes. Their nomadic existence has been replaced by one of living in small coastal communities and villages. The higher concentration of Inuit populations within small regions has placed a stress on some wildlife species. These wildlife species are less abundant within the immediate periphery of the community. Hunting expeditions therefor tend to be lengthier in duration and longer in distance than they were in the past. The cost of these longer trips has risen to the point that some Inuit can no longer afford

The aboriginal Canadian population that resides in Nunavik, who were previously referred to as Eskimos, prefer to be known as Inuit.

Nunavik is the name given to that portion of northern Québec above the 55th parallel that was handed over to the Inuit of Québec during the resolution of their land claim. Some people refer to Nunavik as Nouveau Québec.

The stress placed upon some country food species because of the higher concentration of Inuit living in one community is localized. The vastness of Nunavik and the difficulty encountered when travelling between different areas is sufficient to guarantee the survival of many of the country food species.

to participate in the subsistence hunt. This starts a vicious circle that often ends in poverty and despair.

- 5 Living in communities has also impacted upon the Inuit in other ways:
 - The unique status of the hunter has diminished because food is now available from retail stores. The appearance of other important individuals such as politicians, employers, and professionals has further reduced the unique level of importance previously enjoyed by hunters;
 - 5.2 Some species of country foods are not typically resident near all of the communities. This forces families to live on less varied diets which in turn has a negative impact on health and general well being.
 - 5.3 The lack of country foods has resulted in the consumption of imported foods. ⁹ Some of the imported foods such as vegetables and fruits are seen as positive benefits because of the nutritional value they introduce into the local diet. Other imported foods such as beef, pork and poultry are seen as replacements for country foods. Imported country food equivalents ¹⁰ are exceptionally expensive and are helping erode the cultural values associated with hunting, fishing and trapping for country foods; and ¹¹
 - Many Inuit who were previously engaged in traditional hunting, fishing and trapping activities, are unemployed because they lack the skills, abilities, experience and education needed to work in the limited new jobs being created. 12
- There are many positive benefits associated with community living. For example, newly acquired scientific and health knowledge has resulted in the identification of serious sicknesses caused by occasionally infected country foods. It was found, for example, that fermented walrus meat may contain bacteria, and or parasites that could result in serious injury or death. Some villages have reported multiple deaths because of infected and\or contaminated country foods. In the past, this would have been less apparent because of a lack of communication, facilitates and the distances between family units. The need for the inspection of country foods has been identified by the Inuit,

April 1994

In the north, the term imported foods has a special connotation. It refers to food which is imported from south of the 55th parallel.

lmported country food equivalents are imported foods which replace traditional country foods.

The Inuit population does not want to totally replace imported country food equivalents, as many Inuit enjoy the variety. What is sought is an assured availability of country foods so that they are available as an alternative to the expensive imported country foods.

The creation of employment is one of the three greatest challenges facing Nunavik. There are few resources available to the Inuit for exploitation and the distance from metropolitan Canadian centres makes it even more difficult to be competitive with industry and commerce located in the south.

and health authorities, as a requirement that must be addressed by the Federal and Québec governments.

The Inuit are concerned about their culture and traditions. Important values such as the sharing of food and the role of elders within the village are being challenged and destroyed. The youth no longer see their future within traditional trades such as hunting, fishing and trapping. Attending school is often not seen as a viable option for many because an unacceptably high percentage of Inuit are unable to find employment in Nunavik. The values and norms associated with the new way of life within communities is at odds with what has been previously understood and accepted by the Inuit population. Solutions must be found.

INTER-COMMUNITY TRADE, THE INITIAL CONCEPTS:

- 8 Amongst the many challenges facing the Inuit is the resolution of multi-facet socio-economic concerns. Over the years a consensus has evolved on the commercialization of country foods and how this may resolve some of the more pressing issues:
 - 8.1 <u>Economic activity must be created.</u> Wildlife species are the only commercially abundant renewable resource available to the Inuit. There are no commercial forests and the land is not fit for agriculture. Country foods must therefore become a central focus for economic development;
 - 8.2 Country foods have traditionally been a major focus of Inuit culture and traditions. The use of country foods in economic development must be addressed to include the cultural and social issues faced by the Inuit; and
 - 8.3 Country foods are a product of the land. The various wildlife species are therefore seen and expected to be shared by the Inuit population as a whole. It is essential that a large portion of the Inuit population benefit from the jobs that are to be created.

The James Bay Northern Québec Agreement (JBNQA) does not make provision for the inspection of country foods even if it is to be sold commercially between Inuit. In the past, the JBNQA's interpretation was that there was no legal requirement for the inspection of country foods in Nunavik, that this service was neither requested nor required. This assumption is being reexamined.



Figure 3: Caribou herd near Kuujjuag.

- The notions and concepts that evolved from the desire to commercialize country food has generated much discussion. The initial idea was that wildlife would be hunted, processed, distributed, and sold in all communities. Country food would thus become available to all of the Inuit population, and meaningful employment would be created for hunters ¹⁴ and processing employees. Country food projects were initiated on a small scale by a number of entrepreneurs. Some country food businesses continue to operate and others have ceased to exist. The major obstacles faced by these first country food entrepreneurs were:
 - 9.1 The need for operational infrastructure was usually underestimated. Entrepreneurs were unable to connect into existing distribution and sales networks. They were forced to do everything for themselves, thus making success quite difficult to achieve;
 - 9.2 Requirements for physical facilities such as short and long term freezer storage capacity was often underestimated;
 - 9.3 Cash-flow problems as a result of inventory and storage costs were much higher than initially considered;
 - 9.4 The coordination of activities between country food entrepreneurs was almost non-existent; and

The term hunters also includes fishermen and trappers. Harvesting includes hunting, fishing and trapping.

- 9.5 There was a lack of direction and available skilled experts.
- 10 About 10 years ago the concept of Inter-Community Trade (ICT) was re-examined. Objectives were formulated as follows:
 - 10.1 To promote the commercial harvest of country foods: This was to be an alternative to "imported country food equivalents". Imported country food equivalents are quite expensive in Nunavik because:
 - 10.1.1 The high cost of air transport adds substantially to the wholesale cost of imported country foods;
 15
 - 10.1.2 Each retail facility has comparatively low sales volumes which means that Nunavik's retailers must have higher mark-ups, to generate suitable incomes, than their southern counterparts; and
 - 10.1.3 A lack of competition in the retail sales of food tends to keep prices high.
 - 10.2 <u>To provide employment to hunters:</u> This also has the added benefit of helping the continuance of traditional hunting activities which has important cultural values; and
 - 10.3 The year-round availability of country foods: The country food project will help ensure the availability of country foods throughout all 14 Inuit communities in Nunavik.
- 11 Four years ago, Makivik Corporation undertook a major set of initiatives that included:
 - 11.1 Numerous discussions and several open forums within each of Nunavik's 14 communities to identify the priorities and objectives of the Inuit population;
 - 11.2 An "Executive Summary" on ICT was proposed and distributed by Makivik Corporation. It outlines the purpose and concept of the ICT project as perceived in 1992; and
 - 11.3 The 1992 construction of pilot processing facilities in the three communities and a fourth facility in 1993. 16

OPEN FORUMS ON INTER-COMMUNITY TRADE:

After a review of the public forum transcripts, an examination of the 1993 Annual General Meeting minutes, and interviewing many Inuit, it is evident that the Inuit population recognizes the

After interviewing food distributors and store managers, it is estimated that about 70% of "imported country food equivalents" are transported to Nunavik by air.

The 1992 facilities were constructed in Quaqtaq, Kangirsualujjuaq and Umiujaq. The 1993 facility is being constructed in Kangirsujjuaq.

need for the implementation of the ICT initiative. Naturally, the project has evoked some opposition. After a review of opposing statements made by the opponents, and in discussion with some of their number, it became evident that the vast majority of the opposite concerns are a result of:

- 12.1 A perception, by some, that the ICT project may benefit a preferred few rather than the majority of the Inuit population;
- 12.2 An unsubstantiated fear that some country food entrepreneurs may be put out of business because ICT could become a huge monopoly controlling the entire market; and
- 12.3 The concept and purpose of ICT, at the time the negative comments were made, had not yet been fully developed and explained to the general population.

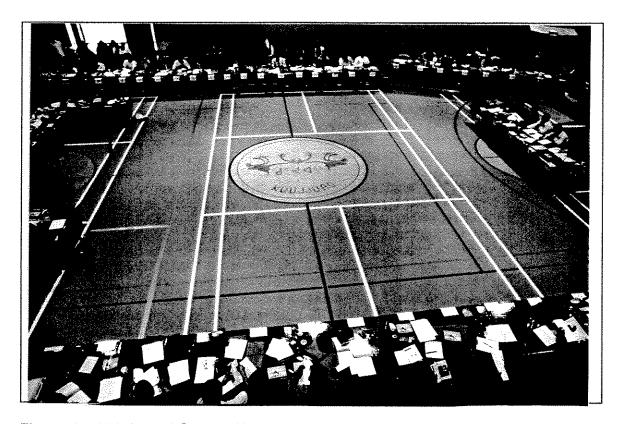


Figure 4: 1993 Annual General Meeting in Kuujjuaq.

The public forums have been beneficial, as they have improved the definition of the ICT initiative. It is important, however, that once this document has been reviewed and approved by the various partners in the ICT initiative, that a major information campaign be undertaken to relieve the concerns of the general population and remove the misconceptions that exist.

RECOMMENDATION

Conduct a major information campaign after the approval of the business plan.

MAKIVIK CORPORATION and ITS 1992 EXECUTIVE SUMMARY ON INTER-COMMUNITY TRADE:

The Makivik Corporation's 1992 Executive Summary contains three elements of direction to the development of this business plan: (i) goals; (ii) objectives; and (iii) the concept. Some of the sections from the Makivik Corporation 1992 Executive Summary that impact directly upon the direction and scope of the ICT project are quoted on this and the following page:

MAIN GOALS

"There has been a segment of the Inuit population (45 to 65 years of age) that, to date, has not been able to take advantage of government assistance programs because of their lack of formal education, being unilingual Inuktitut, and possessing only traditional skills. Their traditional activity has always been hunting, fishing and trapping., an activity that has always been respected but that has been insufficient in sustaining economic self-reliance for themselves and their families. Inter-Community Trade would be a means of improving economic conditions of this age group of the Inuit population."

"In the development of the Inter-Community Trade initiative it is important that the subsistence use of renewable resources be protected. It must be monitored to ensure no undue hardship to the subsistence activity. This has always been the cornerstone of any development in the renewable resource sector. The main goals of this initiative are to:"

"a) Provide a guaranteed income 17 level for Inuit hunters,

Author's Note: One objective of the Inter-Community Trade project is to provide meaningful income to hunters. The commercial nature of the Inter-Community Trade project must not allow it to provide a "guaranteed income" to hunters unless government or other funding is provided in the form of an income guarantee program. Inter-Community Trade, as a corporate entity, should only be expected to put forth a best effort as it can not guarantee the availability of country foods for harvesting.

fishermen and trappers for the age group 45-65 through activity within their traditional occupations."

"b) To ensure an equitable distribution of traditional foods, throughout the Nunavik region, that has been properly inspected and packaged for convenient use. It is to be available in a regularized fashion throughout the year promote food self-reliance in the Nunavik region and improve the nutritional dietary balance of the Inuit."

OBJECTIVES

"There are three primary objectives that have been identified for the Inter-Community Trade initiative:"

- "a) Identification of species concentration, and of activity centres available to the Inter-Community Trade initiative."
- "b) To attain maximum sustainable yield of the renewable resources available to the Nunavik region."
- "c) Provide the necessary infrastructure and assistance to ensure the long-term growth of the Inuit traditional sector of the northern economy."

CONCEPT

"The whole concept of Inter-Community Trade rests on the premise that the Inuit will be willing to pay for traditional foods that are presently available free of charge. The reason must be that there is sufficient value added to the product that makes it worthwhile. The additional value would be the inspection, packaging and processing of the foods. In addition the foods would be available to them year round and not only in certain seasons when the game is close to their communities."

"It must always be remembered that the inspection of the foods is a major element in the increased value of the traditional foods. The end product must meet all health regulations.

"If this initiative is to be successful it must work hand in hand with the Hunter Support Program and not overlap in their respective areas of assistance. Certain changes must be made to the HSP ¹⁹ program

Author's Note: Different groups and government agencies have noted that there are a number of hunters that are less than 45 years of age that should also be included within the Inter-Community Trade project. Provisions should also be made to initiate and train young hunters in the commercial hunter profession.

¹⁹ HSP refers to the Hunter Support Program funded under Québec's Bill 83.

to ensure that the raw product will be channelled to one source, and its relationship with the hunters and fishermen will be clear."

"Any commercialization project will inevitably have an impact on the renewable resource. It is therefore imperative that it be shown that the initiative is viable in the long term, i.e. produce a sustainable yield of the renewable resources. Therefore proper wildlife management principles must be followed to determine the impact that this initiative is having on the resource and on the subsistence activity."

- Makivik Corporation's 1992 Executive Summary contains the major directions and priorities of the ICT initiative. The document addresses important issues such as the conservation and management of the various country food species as well as operational and political concerns that will have to be addressed. The document forcefully makes the statement that the inspection of country foods is a major health issue and that it must be provided through the ICT initiative, with the support and assistance of government regulatory agencies.
- Makivik Corporation's 1992 Executive Summary recognizes that socio-economic projects can not be expected to attain profitability as rapidly as projects which are purely profit motivated. The Makivik Corporation 1992 Executive Summary states:

"Given the nature of this initiative and the difficulties of implementation; this initiative should not be expected to be immediately financially viable."

RECOMMENDATION

Makivik Corporation's 1992 Executive Summary contains many excellent ideas and concepts that have been presented to and accepted by the Inuit population. This document must serve as one of the corner stones upon which the Inter-Community Trade project is to be built.

PILOT PROCESSING FACILITIES:

- Makivik Corporation saw the need for the rapid implementation of the ICT initiative and has undertaken action on two fronts. First, it commissioned a number of studies, including this business plan. Second, was the construction of pilot processing centres.
- The three pilot facilities were constructed by HONCO Construction Inc. in 1992 at Umiujaq, Quaqtaq and Kangirsualujjuag. The structures, complete with processing areas, coolers, freezers and office space are about 210 sq. meters. The contractor foresaw two separate processing areas, one for meat and one for fish.

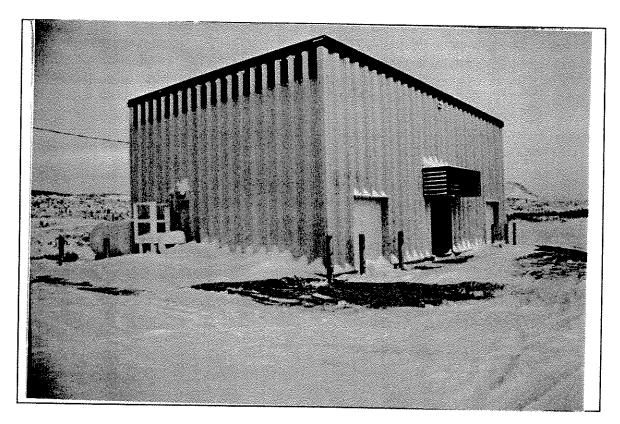


Figure 5: One of the three 1992 Community Processing Centres.

- 19 A review of the operational and regulatory requirements of the project resulted in the following observations:
 - 19.1 Current and proposed regulations will allow for the processing of fish and meat products within a single facility;
 - 19.2 Processing requirements and certification requirements dictate that these facilities be modified; and
 - 19.3 The realization that only one major species of country foods would be processed within a facility at any one time.
- The review of the facilities resulted in a redesign of the basic layout. This redesign allows for a more effective use of available space and a more efficient production process. During the redesign

For the most part, it is the same individuals that will be doing the hunting, fishing and trapping of the various wildlife species that will be required by the Inter-Community Trade initiative. Additionally, the preferred seasons for the commercialized hunting of the different wildlife species generally do not occur at the same time of the year. Therefore, the processing facilities will be most profitable if they process only one country food species at any one time.

of facilities, it was decided that cost constraints would require that changes be accommodated within the existing structure. ²¹ Though this would not provide an optimum layout for production, it was a substantial improvement over the original layout. HONCO Construction Inc. was contracted to modify the three processing facilities and to install the food processing equipment that was provided by SIGESCO Inc. This work was undertaken during the preparation of this business plan and should be completed in time for the processing pilot projects to start by October 1993.

- During 1993, a fourth facility was constructed in Kangirsujuaq. This Facility was (i) based upon the new design; and (ii) this additional expenditure has brought total Makivik Corporation's investment in the ICT project to \$3.0 million.
- Some individuals have criticized the construction as occurring too soon, and others have stated that facilities should immediately be constructed in all fourteen communities. The four sites will be invaluable in testing many of the identified harvest and processing variables. Without these facilities it would be almost impossible to undertake the ICT Project.

A storage facility was added to the Community Processing Facilities to meet operational and regulatory requirements.

SECTION TWO:

PRIORITIES AND POLICIES:

INTRODUCTION:

- The Inter-Community Trade (ICT) initiative is based upon strong socio-economic principles which have been articulated by the Inuit population and their representatives. Their emphasis has been on:
 - 23.1 The creation of jobs;
 - 23.2 The availability of country foods in all communities at a price the Nunavik population can afford;
 - 23.3 The inspection of harvested wildlife and the certification of food processing facilities so that the health of the Inuit is better protected; and
 - 23.4 The preservation of Inuit culture and traditions.
- There is a recognition that initial investments will be required from all levels of government, as well as Makivik Corporation, to ensure:
 - 24.1 The construction of Community Processing Centres (CPCs) and purchase of specialized food processing equipment;
 - 24.2 The capital cost portion of training;
 - 24.3 The initial cash-flow and bridge financing requirements of the project:
 - 24.4 The construction of the Regional Marshalling Facility (RMF):
 - 24.5 The implementation and coordination of the project; and
 - 24.6 The sunken costs associated with start-up and baseline inventory stocks.
- Once capital requirements are satisfied, the project must then become and remain financially self-sustainable. That is to say, once implemented, the ICT initiative must generate sufficient profit to ensure its continued existence and operation.
- Projects which have a strong socio-economic basis, as well as a requirement to be financially self-sufficient, will almost always generate differences of opinion which must be carefully managed. The challenge to all participants of the ICT initiative will be to balance the socio-economic requirements with the need to remain financially self-sufficient. This will produce the greatest social benefit for the Inuit population without having the project fail due to a lack of funds and profit.

- The solution to this challenge is to clearly define socio-economic and financial self-sufficiency principles and policies, that will guide all future decision making. In any organization, there will be discussions on certain day-to-day operations. There must however be principles and policies that will guide the major decision makers as to the direction and activities that are to be undertaken by ICT.
- Equally important, with a project of this scope and magnitude, is how the Inuit population perceives the manner with which decisions are taken. If the population does not understand the reason for certain decisions being made by the managers of ICT, popular support for the project will diminish and operational problems will increase. It is therefore essential that the principles and policies that guide the decision makers be clearly defined and understood by a large portion of the population.

SOCIO-ECONOMIC PRINCIPLES AND POLICIES:

The Inuit population, as well as many Inuit organizations and government agencies, have identified goals that they would like to see achieved when the ICT initiative becomes operational. Some of these policies proposed within this business plan are geared towards the general population, while others have been written to protect those entrepreneurs who feel that ICT may become too strong a force in Nunavik. This section of the report identifies a number of socio-economic principles and policies and provides a summary explanation of each.

CREATION OF EMPLOYMENT POLICY:

The ICT project must be designed and developed to ensure creation of Nunavik community employment as a prime objective. The rationale behind this policy is that the socio-economic needs of the population must outweigh the need to generate profits, as long as the project is financially self-sufficient.

MAXIMUM EMPLOYMENT OF INUIT POLICY

Inter-Community Trade will organize its operations so that a maximum number of Inuit hunters and qualified Inuit employees can earn a meaningful income from the project. To meet this objective, appropriate training and operational support must be provided at all facilities.

EQUAL EMPLOYMENT ACCESS POLICY:

Many of the communities expressed the desire, during the public forums, that each community have equal access to employment. It was noted many times that the smallest communities have the

highest levels of unemployment and that these communities also has the lowest possibility of creating new jobs.

Various options were examined and it was finally decided that the only way to create equal numbers of jobs in all communities was to ensure that the quotas for each wildlife species be analyzed and adjusted so that equitable levels of work are provided in each community.

EMPLOYMENT ACCESS POLICY

Inter-Community Trade will organize its operations so that a maximum number of Inuit hunters and qualified Inuit employees can earn a meaningful income from the project. To meet this objective, appropriate training and operational support must be provided at all facilities.

MAXIMUM VALUE ADDED POLICY:

- 33 It is acknowledged that most costs are considerably higher in the North. This makes it very difficult to compete with established businesses operating in the south. Country food wildlife species are located in the North, and because increased processing reduces the proportional cost of transport and increases local employment, processing should be done within Nunavik.
- 34 Processing addresses two principle areas of operation:
 - 34.1 <u>Primary processing</u> is that activity which takes place in the community processing centres. This includes all work done by food processors to produce and package the various cuts required by the consumer market; and
 - 34.2 <u>Value added processing</u> includes those processes by which value is added to the product. Examples of value added processing are smoking fish and dry curing caribou meat to produce Nikuk.

MAXIMUM PROCESSING IN NUNAVIK POLICY

Preference will be given to entrepreneurs who ensure that the maximum amount of processing is done in the North.

AVAILABILITY OF COUNTRY FOODS POLICY:

- The change in the Inuit lifestyle and hunting practices that occurred when the Inuit moved into villages has resulted in a decreased availability of some country foods. This decreased availability is the result of numerous reasons including:
 - 35.1 Some communities are not located near certain types of wildlife species, for example: Kuujjuaq is about 50 km up-river from Ungava Bay and therefore is distant from seals; and
 - 35.2 The increased cost of hunting, due to distance and capital costs makes it almost impossible for some Inuit to continue with the subsistence hunt.
- The Nunavik population has stated the desire that all country foods be available, in all villages, throughout the year and in all villages. While this is a commendable objective, it will not be possible to realize this objective, in the near or medium term for the following reasons:
 - During the start-up years of the ICT initiative only a select number of different wildlife species will be processed so that proper operational practices can be established. As the project advances, other species of country foods may be added to the list of those to be processed;
 - 36.2 Country food management and conservation requirements make certain species such as Beluga whales unavailable for commercial processing and distribution by the ICT initiative:
 - 36.3 Some country food species, such as salmon and char, are currently commercialized by Inuit entrepreneurs. ICT will not compete with these; and
 - 36.4 Some country foods are processed using traditional methods before they are consumed. Walrus, for example, is often processed using a traditional "fermentation" process which, if done incorrectly, may result in serious illness and death. These processes must be examined, and safe practices identified before it is possible for these country foods to become available, in an inspected format, through the ICT project.

AVAILABILITY OF COUNTRY FOODS POLICY

Inter-Community Trade will endeavour to make most country foods available, in most communities, subject to operational, inspection, certification, conservation and health safety limitations and regulations.

NON-COMPETITION POLICY:

While some entrepreneurs have voiced concerns about the potential impact the ICT project may have on their livelihoods. Many are positive about the project because they believe the new expertise and distribution networks to be established will assist them in their operations. Positive reinforcement for this initiative has come from entrepreneurs involved in either the harvest of fish or in value added processing. Opposition has been from individuals involved in the primary processing and sale of country foods. Their fear seems to stem from a belief that ICT will force them out of business because of a perceived monopoly for the harvest and basic supply of country foods, particularly seal and caribou. Makivik Corporation has addressed this issue directly by stating that:

NON-COMPETITION POLICY

Inter-Community Trade $\underline{\text{will}}$ not compete with existing entrepreneurs;

Inter-Community Trade <u>will not</u> enter into the retail sales market <u>unless</u> there are no other options within a specific community; and

Inter-Community Trade \underline{will} sell primary processed country foods to entrepreneurs \underline{if} a mutually agreeable contract is negotiated and only \underline{if} the entrepreneur's facilities meet licensing and certification requirements.

ASSISTANCE TO ENTREPRENEURS POLICY:

- Many entrepreneurs have demonstrated their capability and desire to operate a variety of different country food businesses. While these businesses have tended to excel in the harvest of wildlife species and others in the processing of country foods, some entrepreneurs occasionally experienced problems with: (i) marketing; (ii) distribution; and (iii) dealing with government agencies. Various government departments, with both provincial and Federal regulatory agencies have expressed limited concern with some country food operations while other agencies prefer to not acknowledge the problem.
- 39 Considerable discussion has taken place and a consensus was reached that, ICT will assist entrepreneurs in some aspects of their operations, if requested by the entrepreneur. ICT will not impose its wishes upon local entrepreneurs.

ASSISTING ENTREPRENEURS POLICY

Upon request, Inter-Community Trade will assist entrepreneurs in solidifying their market position by selling them raw material, and providing required expertise and/or services.

Inter-Community Trade will not finance an entrepreneur's operations nor will it guarantee loans on behalf of entrepreneurs.

FOR THE GENERAL BENEFIT OF THE POPULATION POLICY:

- ICT is a socio-economic entity and as such has corporate and ethical responsibilities to the general public as well as to entrepreneurs and ICT's shareholders. To ensure that all interested parties are treated in the fairest possible manner without disadvantaging the general population, an over-riding policy is required. Some of the primary elements of this policy will include:
 - 40.1 ICT will not give exclusive rights to any entrepreneur or retailer unless the community is so small as to make it non-viable to have two or more competitors;
 - 40.2 ICT will publicly announce through the most effective method available all business opportunities that it may create or establish, and when practical and viable, will allow all interested parties to submit proposals for review;
 - 40.3 ICT will ensure there is sufficient retail competition to keep the price of country foods at an acceptably low level for consumers; and
 - 40.4 ICT will monitor retail competition to enable country food retailers to earn monitor an acceptable level of income.

BENEFIT OF THE POPULATION POLICY

Inter-Community Trade will structure all of its contractual agreements with entrepreneurs, distributors and others with the overriding principal that every agreement benefits the general population.

PROVISION FOR EXISTING ENTREPRENEURS POLICY:

A number of individuals have had to work hard to establish country food businesses in Nunavik. The creation of ICT will facilitate the establishment of new country food businesses by

providing the infrastructure and expertise needed by new and existing entrepreneurs, to enter the country food market. Potentially, these new entrepreneurs could force some existing businesses to close their doors. To prevent this from happening, and to take full advantage of the experience and knowledge gained by these individuals, existing entrepreneurs should be provided with the occasion to sign agreements to work with ICT. Some of the principles that would have to be applied to this policy include:

- 41.1 ICT will make provision for existing entrepreneurs. This provision may be at least equivalent to their current range of operations and may not necessarily include operations for which the entrepreneur is slightly involved. This provision will take the form of the entrepreneur's priority to supply and/or sell certain levels of country foods;
- 41.2 ICT agreements with new entrepreneurs may contain provisions to protect existing entrepreneurs. For example, a new entrepreneur may be restricted to selling their processed country food outside of Nunavik so as to protect existing retail operations in Nunavik; and
- 41.3 ICT will apply all of the principles of the "For The General Benefit Of The Population Policy" when preparing agreements with entrepreneurs.

EXISTING ENTREPRENEURS POLICY

Provision will be given to existing entrepreneurs subject to the conditions within the "For The General Benefit Of The Population Policy".

SELF-SUFFICIENCY POLICIES:

Governments and Makivik Corporation have openly acknowledged the value and benefit of the ICT initiative. All parties have conditionally agreed to provide varying levels of capital investment and start-up funding. Treasury Board of Canada regulations, for example, state that Canadian Aboriginal Economic Development Strategy (CAEDS) and Federal Office for Regional Development (FORD) funding provided by Industry and Science Canada should not normally be used for ongoing operational costs. The guiding philosophy and purpose behind this funding limitation is that nobody wants to continue funding a project that will not become financially self-sufficient.

FINANCIAL SELF SUFFICIENCY POLICY:

The acknowledged requirement for financial self-sufficiency will force the ICT management team to be constantly vigilant so as to identify new areas to reduce costs and maintain a sustainable level of profits. This, coupled with the socio-economic principles previously stated, should result in a corporation which has the correct balance of policies and priorities to ensure that the Inuit population's requirements are met for all generations to come.

FINANCIAL SELF-SUFFICIENCY OF INTER-COMMUNITY TRADE

Inter-Community Trade must be managed and operated so that it becomes financially self-sufficient conditional to the clearly define employment and socio-economic development policies.

SUBSIDIZATION OF COUNTRY FOODS POLICY:

- Our research indicated that the cost of food in Nunavik is already the highest in Canada. Country foods sold in the stores will be produced from locally harvested wildlife and will not require transportation from the south. Some people believe that the retailers will be profit oriented and sell country foods at the same or higher prices than imported country food equivalents. Some inuit believe that a two tier pricing system should be established so country food is provided to the inuit population at subsidized prices, and/or that prices should be fixed to prevent abuse.
- Considerable discussion and analysis has resulted in the identification of a number of facts and issues:
 - 45.1 ICT is a profit-oriented commercial operation, that once fully operational, should no longer rely on Makivik Corporation and the government to fund its operations. This would make it essentially impossible for the ICT project to undertake the subsidization of country food as it would most probably not be able to achieve financial self-sufficiency;
 - 45.2 Besides being a potentially unpalatable two tier pricing system (price paid by Inuit and a higher price for non-Inuit) this is not a manageable option. Since there is no legislation for a two price system, policing would be legally and operationally impossible because no penalties could be imposed for selling country foods to non-Inuit at the Inuit's lower price;
 - 45.3 There are substantial price fluctuations for imported country food substitutes within the different communities in Nunavik. The cost of processing country foods in each community should be roughly the same so the retail price of country foods should also be similarly priced. Country foods should also be substantially cheaper than imported country food equivalent; and
 - 45.4 A "North South" pricing structure is necessary to allow for distribution, transportation, and sales. The RMF's selling price in the South will be substantially higher than in the North. Any surplus from exports could be used to pay a substantial portion of ICT's

Some of the most remote communities in the North West Territories have food and other commodity prices that are as high as those in Nunavik.

co-ordination and quality management activities, which in turn would subsidize the price of country foods in the north.

SUBSIDIZATION OF FOOD PRICES POLICY

Inter-Community Trade is a commercial operation with pricing strategies for country food geared to target markets.

CONSERVATION, INSPECTION AND CERTIFICATION POLICIES:

- There are three areas of control and regulation that must be addressed by the ICT initiative:
 - 46.1 Conservation and management of the country food species;
 - Ongoing inspection of the hunter's harvest to insure that the catch is fit for human consumption; and
 - 46.3 Certification of all facilities and equipment used to process, package, store and transport country foods.
- Wildlife conservation and management principles must be established and followed to ensure the continuing survival and well being of each harvested species. This policy, which is equally as important as the policy to optimize employment, is key to the long term success of the project. Without a commercially sufficient supply of wild life, which is carefully managed and monitored, the Inuit could become hunters with nothing to hunt. The regulatory bodies involved in the conservation and management of country foods are:
 - 47.1 Department of Fisheries and Oceans (DFO) for sea mammals and fish caught off shore and or which travel to open waters; and
 - 47.2 Ministère des Loisirs, Chasse et Pêche (MLCP) which is responsible for all land mammals, fish that are land locked, and birds that do not migrate outside of Canada;
- Inspection of harvested country foods is required to ensure its fitness for human consumption. Inspection combined with the certification of facilities and practices used to process and store country foods, are all essential to the overall health and well being of the Inuit population. There currently is no inspection requirements for country foods in Nunavik, and Inuit entrepreneurs selling country foods to other Inuit are not required by law to have their country foods inspected, nor their facilities certified.

 The regulatory bodies involved in the inspection and certification process are:

April 1994 Final Report Page 21

The James Bay and Northern Québec Agreement (JBNQA) states that Nunavik is exempt from inspection and certification requirements for commercialized country foods.

48.1 Ministère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ) for (i) the inspection of foods if the totality of production is destined for retail sales within Québec, and (ii) the certification of all 14 CPCs operating within Québec regardless of where the retailers may be located;

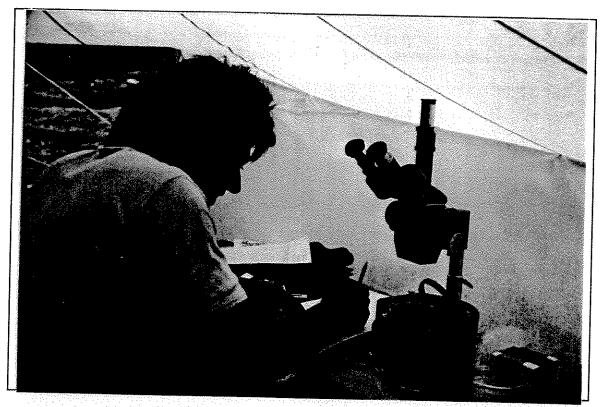


Figure 6: Field biological analysis.

- 48.2 DFO for: (i) the inspection of offshore fish products and marine mammals for which part or all of its retail sales may be outside of the province of Québec, and (ii) the certification of the CPCs if the retail facilities distributing the product are located outside the province of Québec; and
- 48.3 Agriculture Canada (AgCan) for the inspection of land mammals for which any part of consumer sales may be outside of the province of Québec.

CONSERVATION AND MANAGEMENT POLICY:

There is an overwhelming consensus, within the Inuit population, that conservation and management principles must be applied to ensure the long term viability and subsistence of all country food species. It is generally agreed that a combination of traditional Inuit skills, intimate knowledge of the land, combined with scientific practices and techniques from the south, will form the best basis for the long-term management and conservation of the various wildlife species.

- Regulatory agencies throughout the world, that have been tasked with the management and conservation of wildlife have far too many examples of where individuals and groups have abused or damaged wildlife stocks by over-hunting, both legally and illegally. These regulatory agencies have had no choice but to take the position that:
 - 50.1 Relatively few people can be trusted not to abuse wildlife populations by overharvesting; and
 - 50.2 When insufficient information exists with respect to the size and general health of a specific wildlife species, it is best to be ultra-conservative if quotas are to be awarded.

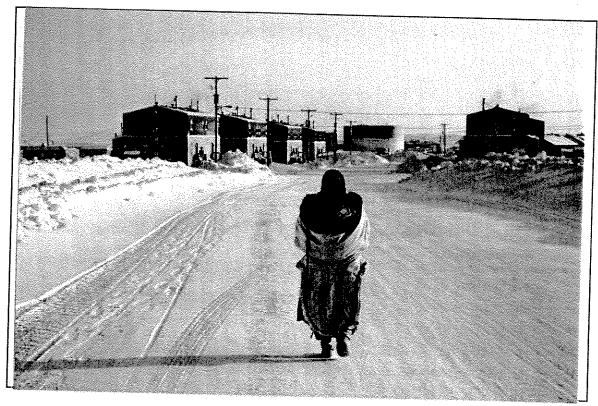


Figure 7: Conservation for future generations.

The best policy for ICT to establish is one of cooperation not confrontation with regulatory agencies. To date, regulatory bodies have reacted favourably to Makivik Corporation's proactive position with respect to the ICT initiative, and the management of country foods.

CONSERVATION AND MANAGEMENT POLICY

Inter-Community Trade will work jointly and in cooperation with all regulatory bodies to jointly manage the spectrum of country foods species.

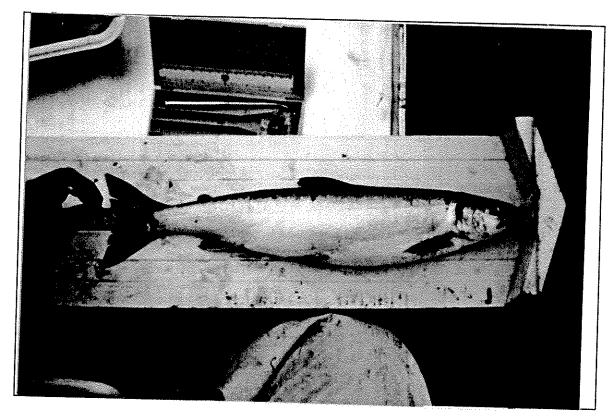


Figure 8: Fish Survey.

MONITORING POLICY:

- Monitoring is one part of the conservation and management process which tracks and measures the harvest of the different wildlife species. Monitoring is essential because, along with population counts, and other management practices, it can provide determination of the health and well being of the various wildlife species. Monitoring will also, through the sampling and measurements that are taken, identify certain health problems, note how well the species' are eating, and determine the species ability to propagate themselves and maintain a healthy population level.
- Monitoring is accepted, by the Inuit, as part of the conservation and management practices that must be established to ensure the long term subsistence of all country foods. Monitoring is also important to the ICT initiative because the conservative nature of some regulatory agencies (with respect to the allocation of quotas) can be offset with sufficiently accurate and reliable information. Monitoring will provide ICT with the information it needs to successfully negotiate appropriate quotas and to better participate in the conservation and management of the various country food species.

MONITORING POLICY

Inter-Community Trade will be an active participant in the monitoring of the various country food species, including the development and the maintenance of the appropriate information databases.

INSPECTION POLICY:

- Food inspection is the process whereby certified inspectors, often veterinarians, and always employees of either the Federal or Québec provincial government, examine food to determine if it is fit for human consumption. The inspectors look for a variety of possible infections, sicknesses, parasites and abnormalities to determine the quality of the food. Inspection is an essential step in quality control and therefore must be addressed by ICT.
- The World Health Organization (WHO) have identified the inspection of food as one of the three most important factors for human health and longevity. The other two factors are medical clinics and water quality.

INSPECTION OF COUNTRY FOODS POLICY

All country foods processed and or distributed by Inter-Community Trade must be inspected.

CERTIFICATION POLICY:

Certification refers to the examining of processing facilities, by government officials, to ensure such facilities, equipment and processes are in conformity with the established regulations. The regulations are the sum of experience and knowledge gained over many decades by government and industry specialists. These regulations, when applied to processing facilities, generally result in food that is prepared in an acceptable manner and fit for human consumption. Inspection and certification will almost totally eliminate the risk of consuming bad food.

CERTIFICATION OF FACILITIES POLICY

To allow for the eventual export of country foods and to ensure the safety and quality of country foods consumed by Inuit, all processing, handling, storage and retail facilities owned, operated and or contracted by Inter-Community Trade must meet the appropriate Federal and/or Québec provincial regulations.

PART TWO:

REGULATORY CONSIDERATIONS:

SECTION THREE: JURISDICTION:

SECTION FOUR: QUOTAS FOR WILDLIFE SPECIES: INSPECTION AND CERTIFICATION:

SECTION SIX: MONITORING OF WILDLIFE SPECIES:



Figure 9: Typical Community Meeting.

SECTION THREE:

REGULATORY JURISDICTIONS:

INTRODUCTION:

- 57 The food processing industry is heavily regulated by both the Federal and Québec governments. The allocation of quotas for the commercial harvest and processing of wildlife is one area that sees divided jurisdictions. Federal agencies allocate some harvest levels and the Québec government allocates others.
- There are also a large number of government regulations that apply inspection and certification within the Community Processing Centres (CPC) and the Regional Marshalling Facility (RMF). The Federal and Québec governments provide many of the same inspection and certification services, and in some instances, approval must be sought from both.
- This section of the business plan addresses the jurisdiction issues as they apply to the Inter-Community Trade (ICT) project's: (i) harvesting and processing operations within Nunavik; and (ii) the sale of country foods.

JURISDICTIONAL RESPONSIBILITIES:

- The allocation of quotas for the commercial harvesting of different wildlife species by ICT within Nunavik fall within the following jurisdictions:
 - 60.1 Ministère des Loisirs, Chasse et Pêche; (MLCP)
 - 60.1.1 Caribou and other land mammals;
 - 60.1.2 Land locked seals;
 - 60.1.3 Land locked fish; and
 - 60.1.4 Birds excluding those that migrate outside of Canada.
 - 60.2 <u>Department of Fisheries and Oceans (DFO):</u>
 - 60.2.1 Sea mammals except land locked seals; and
 - 60.2.2 Offshore fish.
- Inspection is the process by which veterinarians and food technicians determine if meat and or fish is fit for human consumption. The jurisdictions for inspection are:

- 61.1 When the retail outlet selling to the consumer is located in Québec, all inspection is the responsibility of Ministère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ); and
- 61.2 When the retail outlet selling to the consumer is located outside of Québec, the responsibilities are as follows:

61.2.1 DFO:

61.2.1.1 Sea mammals except land locked seals;

61.2.1.2 Land locked fish; and

61.2.1.3 Offshore fish.

61.2.2 Agriculture Canada (AgCan);

61.2.2.1 Caribou and other land mammals; and

61.2.2.2 Birds excluding those that migrate outside of Canada.

- 62 Certification is related to the quality and cleanliness of the facilities as well as the methods and equipment used to process, package and store the food. The jurisdictions for certification are:
 - 62.1 When the retail outlet selling to the consumer is located in Québec, all inspection is the responsibility of MAPAQ; and
 - 62.2 When the retail outlet selling to the consumer is located outside of Québec, the responsibilities are shared jointly as follows:²⁴

62.2.1 DFO and MAPAQ;

62.2.1.1 Sea mammals except land locked seals;

62.2.1.2 Land locked fish; and

62.2.1.3 Offshore fish.

62.2.2 AgCan and MAPAQ;

62.2.2.1 Caribou and other land mammals; and

62.2.2.2 Birds excluding those that migrate outside of Canada.

MAPAQ requires the certification of all food processing facilities operating in Québec, regardless of where the product is to be sold.

- The province of Québec and the Federal government are working together to produce a common set of inspection and certification regulations and to share in the inspection and certification services that must be provided to the processing facilities. In the future, this means that one inspector may be inspecting on the behalf of the Provincial and Federal governments.
- It is important to note that wildlife harvested and processed in Nunavik is not currently inspected by either the Provincial or Federal governments. One of the objectives of ICT is to obtain these services for the health and well being of all country food consumers.
- The table on the following page graphically displays the regulatory jurisdictions with respect to:
 - 65.1 Quotas;
 - 65.2 Inspection;
 - 65.3 Certification;
 - 65.4 Species of Wildlife; and
 - 65.5 The location of the Retail Facilities.

RECOMMENDATION

It is necessary that Inter-Community Trade be fully aware of all jurisdictional responsibilities to ensure compliance with Government Regulations.

Jurisdictions of Regulatory Agencies

Species	Sects*CaribouInlandInshare && Marine& Land& AnadomasOffshoreMarrimdsMarrimdsHishFish		DFO MAPAG MAPAG	DFO AgCan DFO DFO	MAPAQ MAPAQ MAPAQ	DFO AgCan DFO DFO MAPAQ MAPAQ MAPAQ
		Quota Allocation come species are also managed by zone / waterstand and/or spacers)	Retail within Québec	AME Petall Cuebec		Certifico Outside Québec

* Except land locked seals.

** Excludes International migratory birds.

*** All processing facilities in Quebec must recieve MAPAS certification before begining operations, regardless of retail considerations.

SECTION FOUR:

QUOTAS FOR COUNTRY FOODS:

INTRODUCTION:

- Inter-Community Trade (ICT) is dependent upon the availability of country foods. The proper conservation management of the different country food species is the process used to ensure the continued subsistence of each species. One output of the conservation management process, in which ICT must be an integral part, is the establishing of mutually agreeable harvest quotas for each species.
- This section of the report addresses a small number of the elements that went into establishing the country food quotas. The results of a technical conference to establish quotas is presented in the following pages along with the agreed upon quotas and or restrictions for each of the major wildlife species available in Nunavik.

JAMES BAY AND NORTHERN QUÉBEC AGREEMENT:

- The James Bay and Northern Québec Agreement (JBNQA)²⁵ is central to all discussions about the harvest and commercialization of country foods. This agreement, which takes precedence over most Federal and Québec provincial regulations, places priorities on the use and harvest of country foods within Nunavik. These priorities were developed to ensure the continued existence of each species and the availability of country foods for the subsistence of the Inuit population. In order of stated importance the priorities are:
 - 68.1 Conservation of the species: The continued existence of each country food species in sufficient quantities is the first management and conservation priority of all the parties that signed the JBNQA. It is understood that all hunting will stop if the size of a country food species population decreases to a point where there is serious concern about its continued existence.
 - 68.2 The food needs of the Inuit the subsistence hunt: Given that the size and general condition of the country food species is sufficient to allow for its harvest, the Inuit will be allowed to harvest the species to meet their nutritional requirements. There are two concepts within this item that require some explanation:
 - 68.2.1 <u>Guaranteed harvest level:</u> The JBNQA foresees non-negotiable minimum levels of harvest for different country food species. This means that regardless

The James Bay Northern Québec Agreement covers three aboriginal native peoples of which the Inuit are but one. For the purpose of this business plan, discussions will be restricted to those conditions that apply to the Inuit 'beneficiaries' of the James Bay Northern Québec Agreement and beneficiaries will be referred to as Inuit while non-beneficiaries will be referred to as non-Inuit.

- of the demand placed by sport hunters and commercial marketing, the Inuit will always be guaranteed certain harvest levels subject only to conservation and management concerns; and 26
- 68.2.2 <u>Sale of country food between Inuit</u>: The JBNQA foresees and allows the sale of country foods between Inuit including that harvest which forms part of the subsistence hunt.
- 68.3 **Needs of sport hunters:** The sport hunt, limited essentially to caribou, salmon and char at this time, allows Non-Inuit in possession of the required licenses and all permits to hunt and fish the identified species. The current annual sport hunter harvest level for caribou is about 10,500 and this total may rise to a plateau of 12,000 caribou over the next few years; and
- 68.4 **Marketing:** Marketing is interpreted as: (i) the harvest of country foods over and above the Guaranteed Harvest Level and the needs of sport hunters; and (ii) that which is sold to Inuit and possibly non-Inuit. ICT's quotas will be taken from within the total harvest limits that are allocated to this fourth priority. ²⁷

COUNTRY FOOD QUOTAS:

- During meetings between Makivik Corporation and the Federal and Québec provincial wildlife regulators, and in particular those meetings held on the 24th and 25th of February 1993, the participants examined all of the different country food species in an effort to identify: (i) which species might be commercialized; and (ii) the quota level that might be reasonably allocated for that specific species.
- Representatives of the regulatory agencies, Makivik Corporation and a number of consultants met on the 24th and 25th of February 1993. The purpose of the meeting was to examine each of the primary wildlife species to determine its potential for commercialization. As each species was identified, it was placed in one of three categories:
 - 70.1 A commercial quota was established for the wildlife specie;

The Guaranteed Harvest Level is not and never should be considered to be part of the total quota that will be allocated to ICT. The Guaranteed Harvest Level is and must continue to always remain the right of Inuit subsistence hunters.

In the previous section, the importance of ICT participating actively in the conservation and management processes including the monitoring of the harvest, becomes much more evident when the four harvest priorities within the James Bay and Northern Québec Agreement are considered. The ICT quotas are contained within the fourth priority which means that the managers of the ICT project must constantly work with the regulators to ensure that they are well informed and do not become excessively conservative and reduce the quotas to commercially non-viable levels.

- 70.2 A commercial harvest will be permitted on a small scale pilot test level so that information may be obtained to determine if a long term commercial operation could be established; and
- 70.3 No commercial harvest will be permitted.
- The following pages present some highlights of the discussions with respect to each of the country food species examined during the meetings, and the harvest conclusions that were reached. It is based upon these conclusions that ICT will select the country foods that are to be commercialized.

CARIBOU:

The size of the caribou herds in Nunavik have been estimated at between 500,000 and 800,000 animals. While the total population size estimates vary substantially, it is agreed that the total size of the herds are continuing to grow because caribou are being sighted in larger numbers, and in areas where the food supply is marginal. Ministère des Loisirs, Chasse et Pêche (MLCP) is the province of Québec's regulator for caribou and is charged with the conservation and management of the herds.

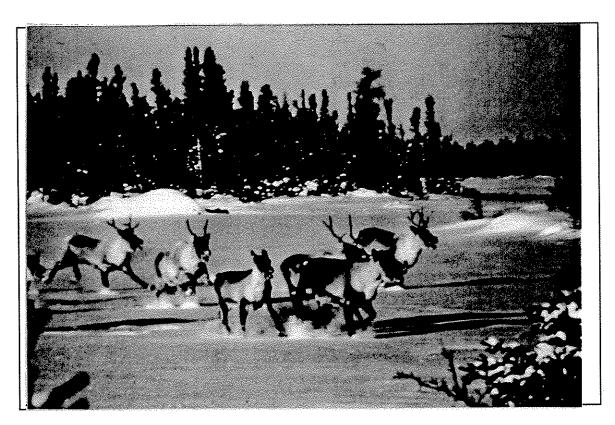


Figure 10: Caribou crossing frozen river.

73 MLCP has written and commissioned a number of reports which note the growth of the caribou herds. These very large herds are currently or will shortly be exceeding the capability of the

local vegetation to support the herds. The need for controlling and limiting the growth of the herds resulted in the establishment of the sport hunt. The sport hunt has not been as popular as initially expected because the high cost of the sport hunt has limited the number of hunters that might otherwise have participated. The current annual sport hunting harvest is about 10,500 animals and this is expected to increase and plateau at about 12,000 annually. ²⁸

- Based on a review of studies prepared for MLCP, and discussions with some biologists, it is estimated that a total of 23,000 caribou over the subsistence and sport hunt must be harvested annually to prevent a serious decline in the caribou herds. This decline would be caused by:
 - 74.1 Over-population causing sickness and disease within the herds; and
 - 74.2 The lack of food for the herds in conjunction with other difficulties will cause other problems such as the cows having increasing problems in delivering their calves.
- MLCP proposed in February of 1993 that an initial commercial harvest quota of up to 10,000 might be considered. The quota would depend upon how well ICT would participate in the conservation and management process and how professionally the harvest would be undertaken. ²⁹

CARIBOU QUOTA

The decisions taken were: (i) to use an annual caribou quota of 10,000 for commercial harvest by Inter-Community Trade; and (ii) that caribou would be amongst the first species to be processed within Inter-Community Trade.

RINGED SEALS:

There are three principal species of seals found within Nunavik: (i) harp seals; (ii) bearded seals; and (iii) ringed seals. For harp and bearded seals it was felt that there was either: (i) insufficient information about population size and the species general condition; and or (ii) the known population was so small as to not allow for the commercial hunt. It was decided that harp and bearded seals would not be harvested commercially.

The plateau of 12,000 caribou is based upon the total number of sport hunters that could reasonably be expected to participate in the hunt, given the current costs to hunt caribou and the economic recession that exists.

The 15 June 1993 meeting to discuss the ICT business plan brought forward a more optimistic position by MLCP. It was stated that MLCP would now expect an annual quota of 10,000 caribou to be harvested by ICT. It was also noted that regulations should soon be changed so that inspected caribou meat can be sold commercially to non-Inuit.

- There is a relative lack of precise information on ringed seals but existing knowledge indicates the <u>potential</u> for a total annual harvest of 20,000 ringed seals. The current subsistence hunt is estimated at 6,000 annually which would leave an annual commercial harvest of about 14,000 for ICT.
- The Federal regulator, the Department of Fisheries and Oceans (DFO), noted they were not authorizing an annual quota of 20,000 seals but, a planning figure of 20,000. DFO would participate in the monitoring of the seal harvest, and as more information is gathered, the 20,000 harvest figure may be adjusted upwards or downwards.

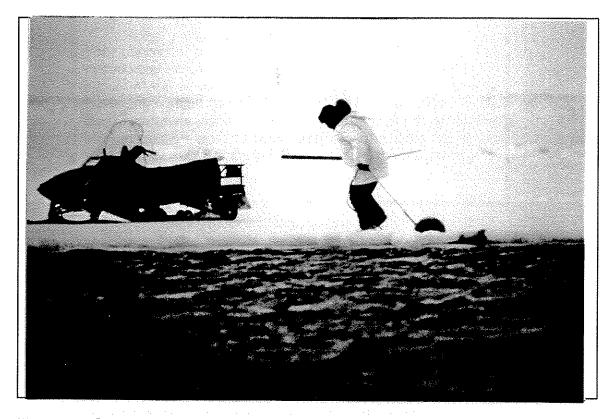


Figure 11: Spring seal hunt.

RINGED SEAL QUOTA

The decisions were to use a potential annual ringed seal harvest of 20,000 for planning purposes. This would include 14,000 for commercial harvest by Inter-Community Trade.

Seals would be amongst the first species to be processed within Inter-Community Trade.

WALRUS:

There is a general consensus that walrus should not be selected for commercialization at this time because: (i) there is insufficient information available to make an informed decision about a potential total allowable catch; (ii) the Inuit preference for walrus is when the meat has been processed using a process similar to fermentation, a process that has not been certified by regulatory agencies; and (iii) fermented walrus meat has been known to cause severe illness and death.

WALRUS QUOTA

The decisions taken were: (i) to not undertake the commercial harvest of walrus at this time; (ii) to undertake a survey of the walrus herds to determine if there is a potential for a commercial harvest; and (iii) Inter-Community Trade and government inspectors should work together to determine how inspection and bacterial analysis of walrus could be provided for subsistence hunters so as to reduce the risk of serious health problems.

SALMON AND ARCTIC CHAR:

Salmon and arctic char are both commercially exploited at about 90 to 95% of the total allowable catch. The amount of salmon and arctic char currently still available for commercialization is about 3,000 annually for each species. Some possibilities exist for finding new stocks as well as fish ranching, however it was felt that there would not be a short term increase in the total allowable catches for salmon and arctic char.

SALMON AND ARCTIC CHAR QUOTAS

The decisions taken were: (i) the available commercial quotas would not be sufficient for a viable operation within Inter-Community Trade; (ii) these quotas would be better used if allocated to new or existing entrepreneurs; and (iii) Inter-Community Trade could use its resources to assist in the distribution of salmon and arctic char, if requested by the entrepreneurs.

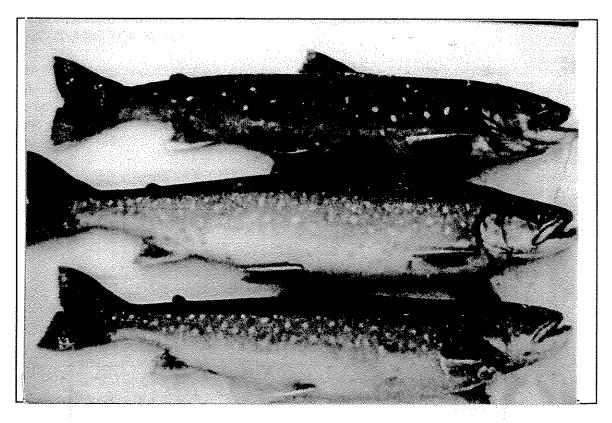


Figure 12: Locally Caught Specimens.

ARCTIC COD:

- The current Canadian and international political climate with respect to Canadian fish stocks, particularly cod, makes for a very delicate situation. It was acknowledged that while arctic cod is not the same species of cod as is found off the coasts of Atlantic Canada, it is still a member of the cod family.
- Arctic cod is an offshore species and very little is currently known about its population size and the regions that it travels. Cod, and it is also assumed true for arctic cod, is near the bottom of the marine food chain and as such is a basic staple for many other fish species such as salmon.

ARCTIC COD QUOTAS

The decisions taken were: (i) too little is known about arctic cod to allow for the establishment of a commercial quota; (ii) research should be undertaken to obtain a better knowledge of species; and (iii) the possibility of using inshore rather than offshore techniques should be examined to determine if the increased employment benefits of inshore fishing can be realized.

LAKE TROUT AND WHITEFISH:

- Neither species is commercially exploited to any extent in Nunavik because of the preference for salmon and arctic char. Scientifically, little is known about the extent and range of lake trout and whitefish except that there should be some room for commercialization. The total allowable catch for the two species is estimated at about 0.3 to 0.5 kilograms per hectare. This would have to be confirmed through research and close monitoring of small pilot projects.
- Of the two fish species, lake trout would be the preferred stock to commence pilots since the flesh of lake trout is more appropriate and more resistant to the manipulation required during its processing. The successful commercialization of lake trout would probably be dependent upon it being smoked and sold at a premium price.

LAKE TROUT AND WHITEFISH QUOTAS

The decisions were: (i) too little is known at this time about lake trout and whitefish to allow for their commercialization; (ii) population identity and total allowable catch must be studied; and (iii) pilot projects should be established to determine the viability of the commercialization of lake trout and whitefish.

PTARMIGAN:

Little detailed information is known about the ptarmigan's range and total population. In some areas, relatively high numbers of ptarmigan have been sighted and in other areas there have not been any recent sightings. The regulatory agencies all agreed that caution would be required to determine if there was sufficient numbers of ptarmigan to warrant its commercialization. Also noted was that the quite small size of the ptarmigan may make the viability of its commercial exploitation questionable.

PTARMIGAN QUOTA

The decisions taken were: (i) too little is known at this time to allow for its commercialization in all regions of Nunavik; and (ii) pilot projects should be established to determine the viability of the commercialization of ptarmigan.

BELUGA WHALE:

86 Beluga whales are a protected species and are the centre of much national and international attention. A subsistence hunt of 60 Beluga whales in Hudson's Bay and 118 in Hudson's Strait is all that is tolerated. A commercial harvest will not be allowed.

BELUGA WHALE QUOTA

The decision was to not hunt Beluga whales commercially because of the protected status of the species.

POLAR BEAR AND MUSK OX:

Both polar bear and musk ox are found in small numbers in Nunavik and their numbers are slowly increasing. While they both have commercial value for ICT, the greatest economic benefit to the Inuit would be to restrict the harvest of polar bears and musk ox to sport hunters. Sport hunters will pay \$10,000 or more to hunt polar bears and musk-ox in the North West Territories. While \$3,000 to \$5,000 of the total is the cost of air fares plus agent's fees, a sizable portion of the revenue remains in the north with the outfitter.

POLAR BEAR AND MUSK OX QUOTAS

The decision taken was that neither polar bear nor musk ox would be commercially harvested.

The outfitters and guides selected for the sport hunt of polar bears and musk-ox should be Inuit who are active in the hunt so as to ensure the greatest benefit to the Inuit population.

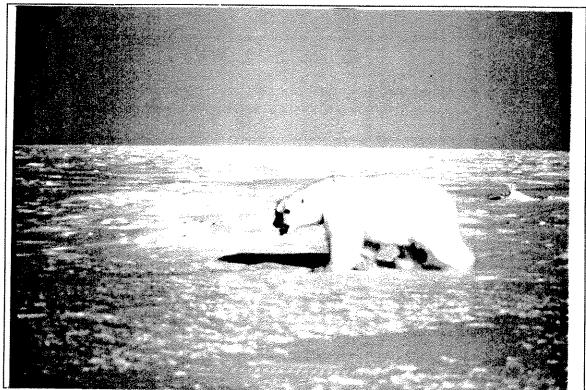


Figure 13: Young adult polar bear.

MIGRATORY BIRDS:

Migratory birds which cross the international border between Canada and the United States are excluded, by international agreement, from all commercial harvesting. For example, Canada geese are hunted by subsistence and sport hunters but may not be hunted commercially.

MIGRATORY BIRD QUOTAS

The decision taken was that migratory birds would not be commercially harvested.

SMALL GAME:

A number of species of small game such as arctic hare and arctic fox are occasionally harvested by subsistence hunters. These species are seen as chance harvests in that nobody goes out to specifically hunt them. If during the hunt for caribou or seal, small game is sighted, it is usually harvested by the hunter. Very little is known on the potential size and distribution of small game species and since small game such as arctic fox plays an important role in the ecological balance in the North, it was decided not to provide a commercial quota for these species.

SMALL GAME QUOTAS:

The decision taken was that too little is known about the different small game species to allocate a commercial quota.

RECOMMENDATION

During the initial years Inter-Community Trade should concentrate on the commercialization of 10,000 caribou and up to a possible level of 14,000 Ringed seals.

SECTION FIVE:

INSPECTION AND CERTIFICATION:

INTRODUCTION:

- Inspection is the term used for the examination of the country food to determine if it is fit for human consumption. Certification is the term used for the examination of processing, wholesale and retail facilities; and the procedures used for the processing, as well as the storage and distribution of food.
- The food industry is extensively regulated at all levels. These various regulatory bodies are concerned with the general well being of the Canadian population and demand that all food consumed by Canadians be of the highest quality. The regulatory procedures and practices, have proven themselves, over the test of time, to be very good at preventing food related sickness and death.
- It is a stated priority of the Inter-Community Trade (ICT) initiative that all country foods be inspected to ensure the health and well-being of the Inuit population. ICT's goal of providing quality country foods to Inuit can only be met by respecting appropriate inspection and certification requirements and working in partnership with the regulatory agencies to ensure a cooperative and productive working environment.
- This section of the report addresses both the issues of inspection and certification as well as the responsibilities of the Federal and Provincial governments.

INSPECTION, CERTIFICATION and THE JAMES BAY and NORTHERN QUÉBEC AGREEMENT:

- The James Bay and Northern Québec Agreement (JBNQA) allows for the commercialization of country foods for sale between Inuit without being subject to federal and provincial restrictions. The sale of country foods to non-beneficiaries of the JBNQA residing in Québec will require adherence to the province of Québec's food inspection requirements. The sale of country foods to non-beneficiaries of the JBNQA residing outside of Québec requires the adherence to Federal food inspection regulations. In all cases, facilities operating in Québec must be certified and inspected by Ministère de l'Agriculture, des Pêcheries et de l'alimentation (MAPAQ). If country foods are to be exported outside of the province of Québec, there is a requirement for the facilities to be certified both provincially and federally.
- The purpose of food inspection and certification regulations is to ensure food is prepared in a sanitary and proper manner so that sickness caused by contaminated or spoiled food is reduced. For this reason, it has been decided that all country foods provided through ICT be inspected, regardless of the consumer. The system where country foods destined for consumption by Inuit is not inspected must not be allowed to continue.

FOOD INSPECTION, THE PROCESS:

Food inspection is the process whereby government inspectors examine food products to determine if it's fit for human consumption. Discussions have been ongoing with MAPAQ, the Québec government department responsible for inspection and certification, to identify an inspection process which includes ICT's concerns and the expressed desire to use traditional hunting to harvest caribou. The results of these discussions are presented below and include: (i) the principal steps of the inspection process, as it is currently done for all livestock meat which is to be sold by an abattoir or producer; and (ii) the results of discussions and negotiations with MAPAQ.

96.1 Government Inspectors:

- 96.1.1 Current Practices: Inspection of meat is performed by either an inspector, who is a veterinarian, or by a lay inspector that has completed the prescribed training courses. In most jurisdictions, both the veterinarian and lay inspector can accept the meat as fit for human consumption, but the lay inspector is not authorized to reject a large piece of meat, or carcass, as this is the responsibility of the veterinarian inspector. Inspectors are government employees who work within abattoirs and are therefore not in a conflict of interest with either the producer or the abattoir.
- 96.1.2 Proposed Practices: There are currently no government inspectors working in Nunavik, as there are no certified abattoirs in operation. The ICT will require a number of inspectors. Because of the desire to create employment for Inuit and the government's desire to control inspection costs, it has been recommended that the government train and employ Inuit inspectors. This will provide employment in the North and substantially reduce travel and infrastructure costs for the government.

96.2 Preliminary Inspection Of The Livestock:

- 96.2.1 <u>Current Practices:</u> Inspectors examine the livestock while it is alive to see if there are any behavioral problems or physical defects that could identify possible sicknesses or other problems.
- 96.2.2 <u>Proposed Practices:</u> The use of traditional hunting practices implies that the animal is harvested in the field and will not be seen by the inspector before it is brought into the community processing centre. Hunters will therefore have to be trained to identify potential problems in the field.

96.3 Stunning and Bleeding the Livestock:

96.3.1 <u>Current Practices:</u> The livestock is stunned, using any of a number of devices, so that it is unconscious and feels no pain. The animal is then raised

It should be noted that the inspection process that is described would generally apply to all country foods except fish for which there are some particular concerns and issues.

- in the air, the jugular cut and the animal is bled using the heart to pump out most of the blood. The animal does not recover consciousness and dies.
- 96.3.2 <u>Proposed Practices:</u> Since the caribou and seal will be harvested in the field, it will have to be bled using traditional techniques. During the field processing tests, attempts will be made to see if additional blood can be extracted and if the increased effort does increase shelf life.

96.4 Post-Mortem Examination:

- 96.4.1 <u>Current Practices:</u> The inspector examines: (i) all of the principal organs including the heart, liver, kidneys and lungs; (ii) the head including the glands and tongue; and (iii) the body for signs of infection.
- 96.4.2 <u>Proposed Practices:</u> Since the caribou and seal will be harvested and eviscerated in the field, it will be necessary to bring the organs and head back to the inspector as well as ensure that the carcass be kept clean. The proposed solution is:
 - 96.4.2.1 The hunter will be provided with numbered bags and accompanying numbered tags so that each harvested seal and caribou can be tagged with the organs placed in a bag for return to the inspector;
 - 96.4.2.2 The caribou will be returned intact to the Community Processing Centre (CPC) without having been quartered and with the skin still on the animal;
 - 96.4.2.3 The harvest will have to be transported to the CPC before it freezes so that it may be adequately inspected by the inspector;
 - 96.4.2.4 The harvest will be transported within containers that have been approved by MAPAQ; and
 - The hunters will be trained in some aspects of the inspector's requirement and then will be certified by MAPAQ and\or the Department of Fisheries and Oceans (DFO). The inspector will only accept seal and caribou that have been harvested by certified hunters.

96.5 Rejection of Meat and or the Carcass:

96.5.1 <u>Current Practices:</u> Meat that is identified by the inspector as being unfit for human consumption is marked for disposal.

Considerable effort has been spent to develop techniques to remove as much blood as possible from livestock as this is believed to increase its shelf life.

- 96.5.2 <u>Proposed Practices:</u> There are a number of unique situations that would have to become part of the process and accepted practices, the most important of which are:
 - Any seal or caribou that is shot through the intestines results in the contamination of the meat which means that it can not be accepted at the CPC for processing.

 An animal thus shot could not be transported within the MAPAQ approved containers. The hide, antlers and other by-products could be sold at the CPC conditional to their not being processed for consumption.
 - 96.5.2.2 ICT should pay hunters for any seal or caribou that is rejected for reasons that could not have been identified at the time of the hunter's harvest eg. a caribou found infected with parasites. This is done to remove the conflict of interest that an Inuit inspector would feel if a relative or good friend delivered a caribou or seal that had to be rejected through no fault of the hunter. This will allow for the employment of Inuit government inspectors in each village.
 - 96.5.2.3 To cover the cost associated with paying hunters for these rejected animals, hunters would be paid 95-97% of the fair market price with the remaining 3-5% being retained to pay for this 'insurance policy'.
 - 96.5.2.4 The Federal Department of Fisheries and Oceans (DFO) has proposed training and hiring an Inuit technician to perform the recommended testing of fish and meat products. This position, to be staffed at the research centre in Kuujjuaq, would provide back-up to the inspectors in the different communities.
 - 96.5.2.5 Federal and Provincial inspectors would continue to make spot checks of the CPCs as would the ICT quality assurance team working out of the Regional Marshalling Facility (RMF). ³⁵

A caribou or seal shot in this manner still contains a substantial amount of meat that can be salvaged and used for subsistence purposes. For example the front and hind quarters would probably still be consumable, depending of course on the trajectory of the bullet.

³⁴ An audit system will have to be established to prevent abuse of the system.

The purpose and operation of the Regional Marshalling Facility is described later in the business plan.

FACILITY CERTIFICATION:

- Ocrtification refers to two aspects of processing operations: (i) the quality, layout and type of materials used to construct the processing facilities, equipment and associated appendages; and (ii) the processes, techniques and supplies used to process the fish and meat.
- The certification requirements for the CPCs will not pose any major problems once all of the inspection issues have been resolved. Extensive discussions with MAPAQ have resulted in a conditional written approval of the first three CPCs that were constructed. All of the conditions in MAPAQ's letter ³⁶ are related to the expected to be approved changes in the inspection regulations.

EVALUATION OF SIMILAR INSPECTION TECHNIQUES:

Upon completion of the field processing pilot projects, the ICT project team should visit processing facilities in Australia. Kangaroo is harvested by hunters and brought to processing facilities where it is later inspected and processed. The Australians have successfully addressed many of the same inspection issues and concerns that we have thus far identified. This trip should be done in conjunction with the New Zealand field trip to reduce costs and save time.

CONCLUSION

Inspection of country foods is essential for the health of the Inuit population.

CONCLUSION

Certification of facilities and processes is essential for the health of the Inuit population.

When MAPAQ certifies a facility, it examines all aspects including the abattoir portion. With traditional harvesting, the country food is harvested in the field and therefore there is no need for the abattoir portion within the CPC. MAPAQ regulations state that the abattoir portion must be present so, until the new inspection regulations are completed and approved, MAPAQ's letter of certification acceptance is conditional to final approval of the new inspection regulations.

RECOMMENDATION

Visit Australia to examine the inspection and processing procedures and issues for kangaroo.

SECTION SIX:

MONITORING OF WILDLIFE SPECIES:

INTRODUCTION:

- Monitoring, as previously discussed, in the priorities and policies section, is a part of the conservation management process which looks at tracking and measuring the harvest of country foods. Monitoring is essential because it, along with wildlife species population counts and other management practices, allows for the determination of the health and well being of the various wildlife species. Monitoring will, through the sampling and measurements that are taken, identify certain health problems, establish how well the species is eating, and the species' ability to replenish itself and maintain healthy population levels.
- Monitoring is important to the Inter-Community Trade (ICT) initiative because the conservative nature of the regulatory agencies with respect to the allocation of quotas. Monitoring will provide ICT with the information it needs to successfully negotiate appropriate quotas and to better participate in the conservation management of the various country food species.

HARVEST MONITORING:

- The conservation management of the different wildlife species is dependant upon a full understanding of Nunavik's wildlife population dynamics. Some of the more important elements are:
 - 102.1 Total size of herd;
 - 102.2 Percentage of herd that are adult females of bearing age;
 - 102.3 Average number of young per year per female;
 - 102.4 Percentage of young that survive to adulthood;
 - 102.5 Number of animals that are eaten by predators; and
 - 102.6 Number harvested by subsistence, sport and commercial hunters.
- The herd's size is also impacted by a number of other factors:
 - 103.1 The amount and quality of available food;
 - 103.2 Intrusion and disruption by man into the traditional habitat of the herd;
 - 103.3 The increase or decrease in other wildlife species that compete for the same food;
 - 103.4 The health and size of the predator population; and

103.5 The impact of pollution.

The subsistence and commercial hunts will be taking place in adjacent areas. The wildlife species to be initially commercialized are ringed seal and caribou. It can therefore be assumed, with a high degree of reliability, that since traditional harvest methods are to be used, that the profile of the wildlife species developed by the information gathered from the commercial hunt will also be applicable to the subsistence hunt. This is even more apparent when it is recognized that the subsistence and commercial harvest seasons will coincide with one another.

105 ICT will be an organized operation in all 14 of Nunavik's communities. ICT will have the infrastructure to obtain detailed harvest information. The Hunting, Fishing and Trapping Association (HFTA) does not have either the infrastructure or the financial resources necessary to undertake the detailed subsistence monitoring at the level that ICT can for the commercial hunt. For these and other reasons, it is recommended that:

RECOMMENDATION

Inter-Community Trade be tasked to undertake the detailed harvest monitoring of the commercialized wildlife species.

RECOMMENDATION

The Hunting, Fishing and Trapping Association will, for the subsistence hunt (of those species commercialized by Inter-Community Trade) only gather the number of each species harvested in each community.

OPERATIONAL AND SCIENTIFIC REQUIREMENTS:

A major operational concern that must be addressed at the start of the ICT project is what type and how much detailed information is required for conservation management and what is required for scientific research. ICT must always support conservation management but cannot be expected to bear the cost of gathering and or interpreting detailed expensive information for scientific research purposes. From a scientific point of view, the ICT project is a researcher's dream because of the volume of information that might be gathered by ICT.

April 1994 Page 50

- The scientific information to be gathered ³⁷ about each country food species would have to be recorded at the time of the harvest and or at the time it is processed at the Community Processing Centre (CPC). Since most of this basic information will be gathered by hunters and food processors, the scientific community will have to provide for the required training and adequate funding.
- Monitoring must be an integral part of the ICT information management system. Monitoring must be central and integrated into the overall information management system so that informed rational decisions can be made about management and conservation issues. This is discussed in more detail later in this business plan.

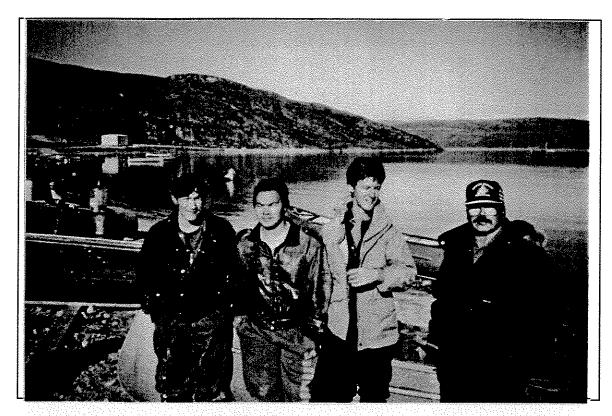


Figure 14: Scientific Research Team Members.

Gathering of information may be as simple as measuring size and weighing the harvested country food, or it may include extracting specimens and organs from each animal.

PART THREE:

HARVESTING AND PROCESSING ALTERNATIVES:

SECTION SEVEN: HARVESTING METHODS AND PRACTICES: PROCESSING METHODS AND PRACTICES:



Figure 15: Preparation for the hunt.

SECTION SEVEN:

HARVESTING METHODS AND PRACTICES:

INTRODUCTION:

- Section Two of this report states that one of the two prime objectives of the Inter-Community Trade (ICT) initiative is to organize its operations so that a maximum number of Inuit earn a meaningful income from the project. This employment objective became the over-riding principle in the selection of appropriate harvesting methods.³⁸
- Discussions were held with representatives of the Hunting, Fishing and Trapping Association (HFTA), as well as other acknowledged experts in the harvest and processing of caribou and seals. Additional factors were also identified to ensure that the appropriate harvesting methodologies were selected. These included: (i) the cost per pound of delivered country food; (ii) the applicability of traditional hunting processes; (iii) capital investment by the individual hunters; (iv) the safety of the hunter; and (v) the quality of the harvested country food.
- Another important element derived from the discussions is the requirement for the inspection of the meat and how this should be done in Nunavik. The results of these discussions and workshops are presented in the following paragraphs.

HARVEST METHODOLOGIES - CARIBOU:

- An examination of the different methodologies that could be employed to harvest caribou resulted in the identification of three different options that warranted closer examination. These options were examined and discussed at length during various meetings, workshops, and interviews:
 - 112.1 **Traditional hunt around each village:** The hunters would use their traditional hunting practices to harvest caribou in the commercial hunting areas around their communities.

Advantages:

112.1.1 Creates the highest level of employment for Inuit hunters.

The policy on the conservation and management of the wildlife species, which is as important as the employment policy is more applicable to the identification of the harvest levels and quotas, and not the harvesting methods.

A three day seal and caribou harvesting and processing workshop was held August 4-5-6 1993 in Montreal. The workshop, which was financed by the Department of Fisheries and Oceans and the Canadian Aboriginal Economic Development Strategy examined how pilot projects would be undertaken and identify what information would be required.

Disadvantages:

- Current government inspection regulations require that the government inspector see the animal before it is slain. This option would require a change in inspection regulations to meet Northern requirements.
- Note: Extensive discussions have taken place with MAPAQ with respect to inspection regulations. There currently exists a proposal which would allow for the inspection of caribou harvested using traditional practices.



Figure 16: Testing fishing options.

112.2 Portable abattoir that follows the herd: Hunters would organize themselves to follow the caribou herd and a portable abattoir would follow the hunters.

Advantages:

The government inspector would be at the site where the caribou is slain.

Disadvantages:

The cost of moving the abattoir would be quite high and in some areas almost impossible because of the rough terrain;

- There may be the need for several portable abattoirs in a village because of the dispersed nature of the caribou herd. This would in turn require a number of government inspectors; and
- Supplying the portable abattoir with sufficient hot water and supplies as well as the food, electricity, and accommodations required by the government inspectors would be almost impossible.
- 112.3 Herding through the use of helicopters: The province of Québec undertook a study to examine using helicopters to herd caribou to one or two central abattoirs. The study showed that this was a difficult but viable option.

Advantages:

- The cost per unit pound of caribou was the lowest using this method; and
- Government inspectors would be at the abattoir to view the caribou before they were slain and inspected.

Disadvantages:

- The majority of the high capital costs are associated with high tech items and equipment such as helicopters;
- Very few jobs would be created for Inuit hunters; and
- Helicopters are cost effective herding devices for distances of up to 40 kilometres. If the herd does not migrate within sufficient range of the abattoirs, the herding of caribou by helicopter will become increasingly expensive and difficult.
- The first option, the harvest of caribou using traditional hunting practices, was the preferred option if the issues related to inspection could be resolved. Numerous meetings were held with Ministère de l'Agricultures, Pêcheries et de l'Alimentation (MAPAQ), and a consensus was formed that given a certain set of inspection related conditions, MAPAQ could accept the traditional hunting process for the commercial harvesting of caribou. Based upon this understanding with MAPAQ, which is explained in detail in the section entitled Inspection and Certification, the traditional hunting process was selected for the harvest of caribou.
- MAPAQ also stated that they prefer a winter hunt for caribou because (i) there would not be any flies or bugs around to lay their eggs in the meat, (ii) the snow would be a clean surface upon which to eviscerate the harvest; and (iii) the meat would not warm up and become unfit for consumption.

RECOMMENDATION

The harvesting method for caribou should be the traditional hunt conducted while there is snow on the ground.

HARVEST METHODOLOGIES - SEAL:

- There are essentially five methods used to harvest seals considered viable, and profitable, by the HFTA and members of the seal and caribou harvesting workshops. The selection of the most appropriate harvesting option(s) is also dependent upon the prime objectives of the ICT initiative which is to organize its operations so that:
 - 115.1 The maximum number of Inuit earn a meaningful income from the project; and
 - 115.2 The operating costs of the Community Processing Facility (CPC) are within profitable limits.
- 116 The harvesting options that were examined are:
 - 116.1 **Traditional hunt using freighter canoes:** With this option, the hunters use 22 to 24 foot freighter canoes to hunt for seals. The hunters would normally return to the community at the end of each day with their harvest.

Advantages:

- 116.1.1 Employs the greatest number of Inuit hunters; and
- 116.1.2 Least costly capital outlay for the hunter.

<u>Disadvantages:</u>

- The hunter is limited to a smaller radius for the hunt because of the limited distance that can be covered in a day with a freighter canoe; and
- 116.1.4 Most prone to problems with the weather.
- 116.2 Traditional hunt using freighter canoes which are accompanied by a larger vessel, 35 to 45 feet in length: With this option, a number of hunters with freighter canoes are accompanied by a single larger vessel. The larger vessel is used to transport the day's catch back to the CPC, thus allowing the hunters to remain at the hunting site and continue their harvest.

Advantages:

Allows hunters to go greater distances in search of seal;

The hunters spend more time hunting and less time transporting their seals back to the CPC; and

Less fuel per seal will be used in transporting the seals back to the CPC.



Figure 17: The summer seal hunt.

Disadvantages:

116.2.4 116.2.5	Requires that the communities possess a larger vessel (most communities do); Hunters must share part of their harvest to transport the seals back to the community; and
116.2.6	A greater level of hunter coordination is required to undertake this type of hunt.

116.3 **Use of Nets:** Nets are strung across narrows between islands in the hope of capturing seals.

Advantages:

116.3.1 Relatively effective method for the low capital cost and the time required to tend the nets.

Disadvantages:

- The quality of meat that will result from a seal that has been harvested by drowning it in a net is often of low quality.
- Note: The netting of sea mammals has been banned via an international moratorium and for which Canada was one of the signatories. This method can therefore not be used for the commercial harvest of seals.

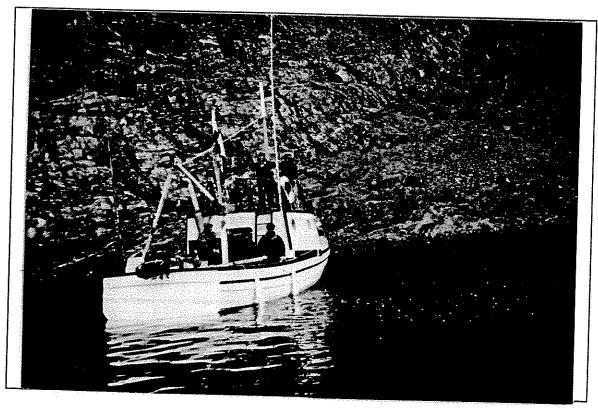


Figure 18: Type of boat owned by community.

116.4 **Use of box traps:** Box traps are constructed of small mesh nets and located where large numbers of seals may pass.

Advantages:

Seals are trapped rather than drowned so their meat is still fresh.

Disadvantages:

116.4.2	High initial capital outlay by the hunters;	
---------	---	--

- Traps are not as cost efficient for ring seals because they do not travel in large groups as do many other types of seals; and
- Some seals may drown in the box trap as they attempt to escape.
- NOTE: The netting of sea mammals has been banned via an international moratorium and for which Canada was one of the signatories. This method can therefore not be used for the commercial harvest of seals.
- 116.5 Winter hunt: Traditional hunt using rifles and or harpoons.

Advantages:

116.5.1 Low capital cost per hunter; and

116.5.2 Large number of Inuit employed.

Disadvantage:

Lower hunt returns for the hunter in comparison to the summer.

After a review of the five options for the harvest of seals, it was decided that two options had definite potential for a commercialized hunt, and that the pilot project to be conducted in October 1993 should test both of the options. The two options selected for the pilot test were: (i) the traditional hunt; and (ii) the traditional hunt accompanied with a larger vessel.

RECOMMENDATION

Two harvest methods should be envisioned for seals; (i) use of freighter canoes; and (ii) freighter canoes accompanied by a larger boat.

ABILITY OF THE HUNTING FISHING AND TRAPPING ASSOCIATION TO SUPPLY THE COUNTRY FOODS:

- During the 1993 Annual General Meeting in Kuujjuaq, discussions were held with the presidents and representatives of the HFTA of all of the villages. Every individual interviewed stated in definite terms that hunters in their communities will not have a problem in meeting their quotas, conditional upon:
 - 118.1 The caribou migrating through their region as well as ringed seals are in sufficient numbers;
 - 118.2 Quality requirements and slaughtering methods specified by MAPAQ are reasonable; and
 - 118.3 The salary paid the hunters is sufficient with respect to the costs incurred and time spent on the hunt.
- Discussions continued with the presidents and representatives of the HFTA about the details of the inspection process, the required hunter inspection course, and the rate of pay for the hunter. All items were generally acceptable to them. The HFTA strongly reinforced and recommended that workshops be held in each community to explain to the hunters the entire process and rates of pay so that there are no misunderstandings.

RECOMMENDATION

The Hunting, Fishing and Trapping Association must be an integral part of the Inter-Community Trade project with respect to the selection and organization of the hunters.

SECTION EIGHT:

PROCESSING METHODS AND PRACTICES FOR SEAL AND CARIBOU:

INTRODUCTION:

- Processing is that part of the Community Processing Centres' (CPCs') operations which begins with the acceptance of inspected caribou and seal carcasses and finishes with the product being processed and packaged for consumer delivery. Many of the skills and practices used in facilities to process beef and pork can be applied to operations in Nunavik. Some modifications will be required to adjust to the particular differences that are encountered processing seal and caribou.
- 121 In addition to the differences in processing seals and caribou, there are a number of other elements that must be considered:
 - 121.1 Operations in the north have regional problems, like extreme cold, and difficulties operating sewage and waste treatment systems;
 - 121.2 The lack of trained personnel to work in the CPCs; and
 - 121.3 Remoteness from technical support and suppliers of equipment, parts and packaging material; and packaging and storage criteria are more important because of the longer shelf life that is required, and the need for packaging that can withstand the varied modes of transportation. These and other issues are discussed in the following paragraphs.

PROCESSING CARIBOU:

- A considerable portion of the current experience and techniques used in processing caribou are associated with the processing of field cut meat harvested by sport and subsistence hunters. The process commonly followed by most sport and many subsistence hunters is as follows: (i) the caribou is bled and eviscerated; (ii) the head, skin and lower half of the legs are removed and often discarded; and (iii) the carcass is divided into 4-6 pieces to facilitate transport.
- 123 Caribou that has been field cut loses a number of prime cuts because the butcher is left with fewer options to process the hunter's harvest. Normally a butcher will prepare a few roasts with the remainder going into steaks, chops, ribs and a large volume of ground meat. These cuts, while acceptable to the sport hunters, are less acceptable within Inter-Community Trade (ICT) because some of the best cuts are lost and the wholesale value of the carcass lowered.
- Discussions with Ministère de l'Agriculture, des Pêcheries, et de l'Alimentation (MAPAQ), food processors, and hunters has resulted in the conclusion that commercially hunted caribou should be

returned, whole, to the CPC after having been bled and eviscerated in the field. The reasons for this are threefold:

- 124.1 The butchers in the CPC will be able to make the most profitable use of the various cuts available to them;
- By leaving the caribou intact when it is brought to the CPC, the government inspector will be able to inspect the entire caribou to ensure that it is fit for human consumption; and
- 124.3 The meat will be clean because the skin will have been left on and the membrane separating the cavity wall of the caribou from its organs and intestines will also be present.
- Bringing the carcass whole to the CPC has some additional benefits:
 - 125.1 The hide is left intact and thus has a higher value;
 - 125.2 It reduces the work required of the hunter in the field which allows the hunter more time to hunt; and
 - 125.3 It facilitates the inspection and monitoring process within the CPC.
- 126 ICT caribou pilot harvest and processing field tests, are planned for the winter of 1993-94. During the field tests a number of caribou processing options should be identified and tested by professional butchers. The results of these tests must be documented so they can be used to:
 - 126.1 Further develop training packages for meat processing employees; and
 - 126.2 Identify the most profitable and marketable cut selections.

RECOMMENDATION

Harvested caribou must be returned whole, not quartered, to the Community Processing Centres.

PROCESSING SEAL:

A review of the literature on seal processing and the numerous unsuccessful attempts at trying to sell seal meat to non-Inuit has resulted in the conclusion that ICT's sales of seal meat will be restricted to the Inuit population. This is an important consideration when planning for the processing of meat. With caribou we were looking for the meat cuts that would be most profitable for the ICT initiative. With seal, we do not have any preconceived notions about meat cuts because there is little known about the best process to use within the CPCs.

- The seal and caribou workshop held on the 4th-6th of August this year examined the issue of processing seal meat. The conclusions were to:
 - 128.1 Observe a number of Inuit processing seal meat using traditional methods and tools;
 - 128.2 Have professional butchers examine the seal meat structure, with Inuit present, to determine the possible cuts;
 - 128.3 Have a number of Inuit attempt the cuts identified by the butchers; and
 - 128.4 Compare the time required to process a seal using traditional cuts to the time required to process seals using the butcher identified cuts.
- The pilot processing field tests will provide through-put production information, consumer preferences, and the information needed to fully develop the training program for seal meat processors. Additional benefits that will come from the pilot tests are:
 - 129.1 Inspection and certification issues will be addressed through MAPAQ's participation; and
 - 129.2 The supplier of the processing equipment will be present to identify plant and equipment configurations that are more appropriate for seal processing.

PRODUCT AND PACKAGING PREFERENCES:

- The product and packaging preferences of the Inuit population were examined through discussions with a number of retailers and from a review of the preliminary results of the marketing taste tests conducted in Quartaq. Some of the main points identified include:
 - 130.1 Preference is for smaller, easier to prepare packages. It was found that the traditional means of working with a large portion of a carcass proved to be inconvenient, especially in the smaller households composed of elders or single parents;
 - 130.2 Some store owners such as Northern Stores Inc. are reluctant to have caribou and seal meat in their stores unless it is frozen in a sealed bag. This is because the proportionately high blood content of country foods, can result in a mess and freezer certification problems;
 - 130.3 Smoked fish is popular. Traditional smoking has left many Inuit with a preference for hot smoked fish which is drier and tougher than cold smoked fish. The southern market prefers cold smoked fish. Cold smoked fish is starting to make inroads within Nunavik; and
 - 130.4 Cured un-cooked caribou meat (Nikuk) is an Inuit delicacy enjoyed by the entire population. Nikuk is typically sold in small plastic wrapped packages of 35 to 100 grams, as well as in bulk. It is served as a complementary item on Air Inuit flights. The taste of Nikuk may be strong for some individuals; however, it could be marinated or flavoured and prove to be a very popular item in the South.

To keep initial capital costs down, and facilitate the training and implementation process, it was decided that ICT should initially restrict its processing to the production of frozen meat packaged in vacuum packs. This decision greatly reduces the problems associated with quality control and facilitates certification and Quality Management Plan considerations. At a later date, when the ICT a wider range of country food products.

RECOMMENDATION

Initial processing must be restricted to frozen vacuum packed products.

QUALITY MANAGEMENT PLAN:

- 132 The term Quality Management Plan (QMP) was coined by the Department of Fisheries and Oceans (DFO). The purpose of the QMP is to have processors of fish and sea mammal meat prepare a document describing processing and operations at their facilities. Within this business plan, the term QMP has been taken a step farther to include the wide range of activities and controls essential to a project of this scope and complexity.
- 133 The QMP will also be the operational and quality control portion of the Quality Management and Operations Manual, for all 14 CPCs. During the preparation of this business plan, Makivik Corporation agreed to the requirement for an expanded QMP, and has undertaken the steps completed by the end of February 1994.

PROCESSING OF COUNTRY FOOD BY-PRODUCTS:

- The ICT initiative must make a great effort to ensure that all country food by-products are processed to the maximum extent possible. By-product processing is essential to the project for the following reasons:
 - 134.1 The image of the project is critical to good public relations. The current image of the Inuit population is one of resourcefulness and total use of its harvested resources. The waste of harvested by-products would change the public's image of the ICT project and could result in unnecessary negative public reaction;
 - By-products, including the hides, antlers, seal penis bones, etc. are all relatively easy to process and sell; however, the use of fat and bones in the production of protein concentrates and other products must also be examined; and
 - 134.3 The processing of country food by-products, some of which will utilize traditional skills and knowledge, has the potential of creating 125 to 150 additional jobs in Nunavik.

- The benefits of by-product utilization except for antlers and un-processed hides, has not been included within the financial analysis of this business plan. One of the main purposes of this business plan is to determine if ICT is viable as an operation, without the additional revenues from supplementary by-product processing. By-product processing should be examined by ICT through a number of separate initiatives and pilot projects.
- 136 ICT has control over all by-products as the entire eviscerated carcass of all country foods shall be brought into the CPCs. Because ICT has control of the by-products and because ICT has a reputation to establish and maintain, ICT must play a central role in the processing of all country food by-products.

RECOMMENDATION

By-products must be used to the maximum extent possible with every effort being made to create jobs in Nunavik.

EVALUATION OF SIMILAR PROCESSING TECHNIQUES:

137 Upon completion of the field processing pilot projects, ICT representatives should visit processing facilities in New Zealand. New Zealanders process about 200,000 deer per year using certification standards and regulations similar to those used in Canada. The New Zealand deer produces about the same amount of meat as a caribou and the processing centre equipment has been adopted to those needs. This field trip to New Zealand should be coordinated with the field trip to Australia required for inspection purposes.

RECOMMENDATION

New Zealand facilities must be visited to see how they have constructed and operate their processing facilities and how they address certification issues.

PART FOUR:

MARKET POTENTIAL:

SECTION NINE: SECTION TEN:

MARKET SURVEY:

PROMOTION OF COUNTRY FOODS:



Figure 19: Small Community Store

SECTION NINE:

MARKET REVIEW:

INTRODUCTION:

- The marketing of country foods has been addressed according to the following priorities:
 - 138.1 The sale of country foods to beneficiaries of the James Bay and Northern Québec Agreement (JBNQA);
 - 138.2 The sale of country foods to non-beneficiaries of the JBNQA who reside in Nunavik; and
 - 138.3 The potential sale of some country foods, mostly caribou, to consumers residing outside of Nunavik.
- The marketing of country foods has been addressed a number of times during the last few years. The most notable of these reviews and surveys have been:
 - 139.1 Marketing Caribou Meat From Nouveau-Québec produced by the Ministère du Loisir, de la Chasse et de la Pêche (MLCP) in 1984;
 - 139.2 The public forums on Inter-Community Trade and country foods conducted by Makivik Corporation throughout 1991 and 1992;
 - 139.3 Marketing Study Relating To Inter-Community Trade (ICT) prepared by David Barrett in March of 1992; and
 - 139.4 Feasibility Study For The Re-Establishment Of The Seal Fishery In Northern Québec prepared by SINAQQ Enterprises Inc. in April of 1992.

MARKETING OF SEAL:

During the five year period, 1976-1980, the detailed food survey noted within the Barret Report identified the following annual edible weights, in pounds, that were consumed in Nunavik. These totals are summarized in the following table.

Marketing Study Relating To Inter-Community Trade (ICT) prepared by David Barrett in March of 1992;. The total annual edible weights are presented in this report are found on page 7 of the Barrett report.

1980 TOTAL ANNUAL CONSUMPTION OF SEALS (ACTUALS)

SEAL SPECIES	WEIGHT IN POUNDS
Ringed Seals	207 700
Bearded Seals	387,733
Ranger Seals	215,598
Harp Seal	1,845
TOTAL WEIGHT	15,466
(POUNDS)	<u>620,642</u>

- To estimate the weight of seal that might be consumed in 1993, the following assumptions are made:
 - 141.1 The per capita consumption of seal meat has been reduced by 15% 41 during the last thirteen years as a result of increased consumption of imported country food equivalents, and a shortage of seal meats within some communities;
 - 141.2 There has been a population increase of 14% during the last thirteen years which will produce an almost equivalent demand increase of about 10%; and
 - 141.3 Harp and Bearded seals will not be processed commercially so ringed seal will replace 50% of this market.
- Using these assumptions, it is possible to forecast the total number of pounds of each species of seal that might be consumed in 1993. This information is presented within the table on the following page, with the total for Ringed seal being forecasted.
- The assumed annual allocation (for planning purposes) of Ringed seals for subsistence and commercial harvesting is 20,000. ⁴² This allocation includes the subsistence hunt estimated at 6,000 ringed seals, leaving a total potential commercial harvest of 14,000 Ringed seals.

On a per capita basis, the consumption of imported country food equivalents has increased about 10% during the last ten years, or 1% per year. This is believed to produce an equivalent reduction in the consumption of traditional country foods.

It must be reinforced that this is a planning figure, not a quota. The quota will likely be established by DFO once studies have been completed.



Figure 20: Planning for the future.

- An important consideration when computing forecasted consumption demands for country foods by Inuit in Nunavik is whether or not the consumer will pay for the country food at a store. The extensive public forums on Inter-Community Trade and country foods conducted by Makivik Corporation throughout 1991 and 1992, as well as the Marketing Study Relating To Inter-Community Trade (ICT) prepared by David Barrett in March of 1992 all demonstrate that the demand for country foods, including seal meat, to be sold in Nunavik's retail stores is feasible as the Inuit will pay for seal sold in country food stores.
- Discussion with Department of Fisheries and Oceans (DFO) officials who have been involved in a number of studies to determine the feasibility of selling seals to non-Inuit Canadians shows that this market is almost negligible. To keep marketing and distribution costs to a minimum, and to concentrate efforts on productive activities, marketing and sales must be limited to the sale of seal meat within Nunavik.

RECOMMENDATION

There is a market for 20,000 ringed seals and that this market will be limited to Nunavik.

April 1994

1993 TOTAL ANNUAL CONSUMPTION OF SEALS (FORECASTED)

SEAL SPECIES	WEIGHT IN POUNDS
Ringed Seal, 1980 Level	331,512
Consumption Reduction	-15%
Population Increase	+10%
1993 Ring Seal Forecast	309,964
Other Seals, 1980 Level	239,209
Consumption Reduction	-15%
Population Increase	+10%
% Converted to Ringed Seal	50%
Additional 1993 Ringed Seal	<u>111,831</u>
TOTAL 1993 FORECASTED RINGED SEAL DEMAND IN POUNDS	<u>427,795</u>
Pounds of meat per Ringed Seal 43	20
TOTAL NUMBER RINGED SEALS, FORECASTED CONSUMPTION	<u>21,397</u>

The 20 pounds per seal was identified during the Workshop on the Harvesting and Processing of Ringed Seals.

RECOMMENDATION

Inter-Community Trade and Makivik Research must work with the Department of Fisheries and Oceans to establish a realistic quota for ringed seals that is commercially viable and which meets conservation management requirements.

MARKETING OF CARIBOU:

- 146 The marketing of caribou, as presented in the following sub-sections of this business plan, addresses the three markets identified in the introduction to this section:
 - 146.1 The Inuit market in Nunavik;
 - 146.2 The non-beneficiary market residing in Nunavik; and
 - 146.3 Export south of the 55th parallel.



Figure 21: A Public Meeting.

en al la company de la comp

THE INUIT MARKET:

Like seal, a number of marketing studies have been done for caribou. With respect to the sale of caribou meat to beneficiaries, the Marketing Study Relating To Inter-Community Trade (ICT) prepared by David Barrett in March of 1992 and the public forums on Inter-Community Trade and country foods conducted by Makivik Corporation throughout 1991 and 1992 amply support the fact that there is a seasonal market for the purchase of caribou meat by the Inuit.

CONCLUSION

There is a seasonal market for caribou meat sales to the Inuit of Nunavik.

THE NON-BENEFICIARY MARKET:

Non-beneficiaries residing in Nunavik are not allowed to buy some types of country foods, eg. caribou. Many non-beneficiaries currently sport hunt caribou and have acquired a desire for caribou. The public forums on Inter-Community Trade and country foods conducted by Makivik Corporation throughout 1991 and 1992 fully demonstrated that there as a strong demand by non-beneficiaries for processed and commercialized caribou meat.

CONCLUSION

There is a market for caribou meat sales to non-beneficiaries residing in Nunavik.

CONCLUSION

It is estimated that half of the commercial caribou quota (5,000 of the 10,000 total) will be sold to beneficiaries and non-beneficiaries residing in Nunavik.

THE EXPORT MARKET:

The purpose of ICT project is to first satisfy the demand for country foods in Nunavik, and then, if there is a surplus of country foods, to export and sell it outside of Nunavik. Caribou has the

potential for export sales. MLCP and other Québec government departments have presented a document to the Québec cabinet which seeks approval for the sale of caribou to non-beneficiaries of the JBNQA. All indications show that this should be approved before the end of the current calendar year.

The marketing and sale of caribou was addressed at length in the study entitled The Marketing Caribou Meat From Nouveau-Québec produced by MLCP in 1984. It is most important to note that if half of the 10,000 annual caribou quota were to be exported to Québec from Nunavik, that the 5,000 caribou would represent less than 0.0062 % of the beef consumed in Québec, or 0.0027 % of all the meat, poultry and fish consumed in Québec. In other words, if half of the meat of the annual quota of 10,000 caribou were to be exported from Nunavik to the rest of Québec, only one Québecer in 100 would eat a single meal with caribou meat during the year.

CONCLUSION

The information in the Ministère du Loisir, de la Chasse et de la Pêche study, combined with information received from Makivik Corporation, the public forums and individual interviews have demonstrated that: (i) the export market demand for caribou will outstrip supply by a factor of at least seven.

CONCLUSION

If all of the quota of 10,000 caribou had to be sold outside of Nunavik, it would only satisfy 30% of the demand within the province of Québec.

PUBLIC OPINION OUTSIDE OF NUNAVIK:

151 The MLCP study extensively interviewed the Québec population. The population was significantly in support of the marketing of caribou. A summary of the observations presented in the MLCP report are as follows:

"As a rule, those surveyed who favour marketing were motivated by product quality and the existence of good controls. Those who do not support marketing generally fear extinction of the herd.

A small number of hunters were also contacted. The majority (66%) were in favour whereas 26% are opposed and 8% are undecided."

152 Discussions with MLCP and MAPAQ officials, as well as the research performed by the province of Québec prior to submitting the request to Cabinet for the commercial sale of caribou, all indicate strong support from the general public.

RECOMMENDATION

Once the supply of caribou exceeds the demand within Nunavik, the excess should be marketed only within Québec. This option will result in the sale of all surplus caribou at the lowest marketing cost to Inter-Community Trade.

Regardless of the strong support from the general public, there will always be individuals and groups that will voice opposition that the proposed sale of caribou meat. It is necessary that the ICT project team have a prepared communication plan (at the time the province signs the agreement to allow for the commercialization of caribou) that is pro active rather than reactive.

RECOMMENDATION

Develop a communication plan for the commercialization of caribou meat.

April 1994

SECTION TEN:

PROMOTION OF COUNTRY FOODS:

INTRODUCTION:

Individuals who have an understanding of the North and how small villages work and interact, will immediately understand that the promotion of country foods within the Inuit villages of Nunavik will be substantially different than what happens in southern towns and villages. This section of the report will address how promotion should be undertaken in Nunavik.

PROMOTION STRATEGY:

- 155 Introduction of a new range of products in the south would usually requires a complete range of tests and promotions to gauge consumer response and to compare those results to known standards and results. Nunavik and country foods are different in that:
 - 155.1 According to a 1992 market survey by David Barrett, survey results in Nunavik are not comparable to any previously marketed and studied region in Canada so it is impossible to compare information; and
 - 155.2 Country foods are sufficiently different from other southern foods as to make true comparisons exceptionally difficult.
- 156 Market research coordinated by Makivik Corporation established the demand for country foods in Nunavik. Therefore, efforts should be directed towards the promotion and continued market analysis of country foods. The promotion channels, proven to be most effective in Nunavik are:
 - 156.1 Local Inuit FM Radio. (pre-recorded cassettes and talk-shows). The talk shows, which are very popular, solicit and produce considerable public response to a wide range of issues. It would be relatively easy to obtain public opinion on: (i) the quality of country foods, (ii) preferences for a range of meat cuts and size formats; (iii) taste and preparation preferences; and, (iv) a whole range of associated issues which would result in improved service to the consumer.
 - Note: Local Inuit FM radio has proven to be the most reliable way of tracking preferences in Nunavik
 - 156.2 **Regional TV.** (advertising, public broadcast messages, and interviews). This format is a high cost option. Its best use is when a message is to be delivered rather than trying to seek information.
 - 156.3 **Posters and Educational Campaigns**. This format works best when it is be incorporated within an activity sponsored by the schools, health agencies and or the Hunters Fishermen Trappers Associations (HFTA). Campaigns by Inter-Community

- Trade (ICT) would mean that there would be more control over the direction and content but at a higher cost in time and money.
- 156.4 **Public Appearances.** This is exceptionally effective, when done in community halls and schools. A public appearance can be used to effectively introduce new initiatives and products. This option provides immediate public response.

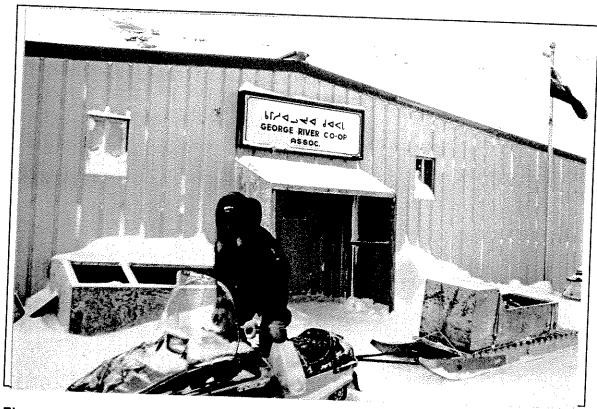


Figure 22: Promotion is often by word of mouth.

PART FIVE:

ANALYSIS OF OPTIONS:

SECTION ELEVEN: SECTION TWELVE: SECTION THIRTEEN: SECTION FOURTEEN: SECTION FIFTEEN:

PLANT AND FACILITIES:
REGIONAL MARSHALLING FACILITIES:
TRAINING, THE ULTIMATE PRIORITY:
MONITORING OF COUNTRY FOODS:
ICT, THE CORPORATION:

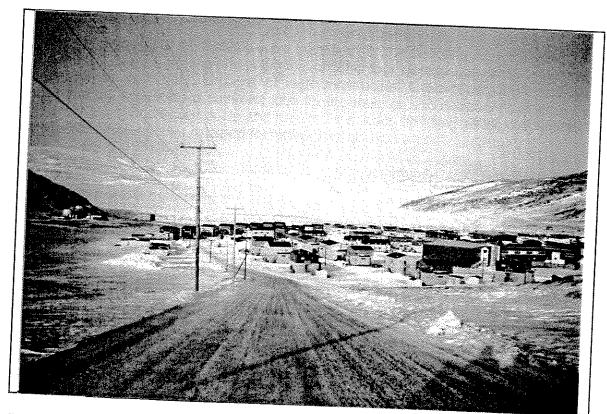


Figure 23: View of typical community.

SECTION ELEVEN:

PLANT AND FACILITIES:

INTRODUCTION:

- 157 Major issues and solutions have been identified with respect to: (i) the underlying socioeconomic and commercial principles that will form the basis for the Inter-Community Trade (ICT) project; (ii) the different seal and caribou harvesting methodologies to be utilized; (iii) the identification of the additional species of country foods to be harvested after the project has been implemented; and (iv) the changes and adaptations that are required to the inspection and certification regulations for their adaptation to the northern traditional harvesting methods.
- Amongst the last major design issues to be addressed within this business plan are those issues related to the selection of the types and capacities of the plants and facilities that will be required to process and store the country foods. This section of the business plan will identify the major plant and facilities options that are available to the ICT project and state which option best meets the objectives of the project.

HANDLING AND PROCESSING OPTIONS:

159 A total of seven different options were identified for the handling and processing facilities required by the ICT project. Of the seven original options, four were discarded because they were: (i) too expensive to implement, because of high construction and/or operating costs; (ii) highly mechanized and did not produce sufficient jobs for the Inuit; or (iii) dependant extensively on air of the meat. The three options retained for further examination are:

159.1 **Option 1:** Handling facilities in each community with two or three regional processing facilities;

159.2 Option 2: Three regional facilities with no community handling facilities; and

159.3 **Option 3:** Community Processing Centres (CPC) with a central Regional Marshalling Facility (RMF).

OPTION 1: HANDLING FACILITIES AND REGIONAL PROCESSING FACILITIES:

The concept behind this option is that country foods are received in the handling facilities where it is inspected, quartered, placed in boxes, and shipped to one of two or three regional processing centres. At the regional processing centres the country food processing is completed and packaged in retail format.

Initially, this option was the preferred choice because it appeared to reduce initial capital costs and required fewer skilled meat processors. However, upon an in depth examination, it was found that:

Advantages:

161.1 The implementation of this option would be somewhat simpler than the other options, with respect to the handling facilities.

Disadvantages::

- About half of the total jobs would be in the regional processing centres so only two or three villages would receive a large employment boost. This goes against the objective of trying to create a more equal number of jobs in each of the 14 communities;
- 161.3 The savings of equipment capital cost in this option are not what was initially expected. Each facility, regardless of whether it is a handling or processing facility, requires quite similar equipment, so there is only a very small savings (5-10% maximum) in equipment costs;
- 161.4 The total square footage of this option is slightly less (10-15%) than the third option so there initially appeared to be a facilities cost savings. Further analysis of this option showed that the total freezer and cooler cubic capacity requirement for this option would be higher (12-15%) than the third option. The end result is that capital facilities requirements for options one and three are equivalent;
- The only viable transportation option for the movement of country foods is the use of air transport.

 This option, however, requires a considerable amount of handling as well as additional capital facilities at the airports not required by the third option.

 This increases the total capital cost of the facilities by about 10% or \$2.0 million;
- 161.6 The incremental higher cost of air transportation for this option over the third, is about \$1.10 per pound of country food resulting in an increased retail price of \$1.45 which would have to be passed on to the Inuit population; and
- 161.7 Excluding capital costs, only 60-65% of operating costs goes to salaries paid to Inuit.

The 1992 transportation study entitled "Nunavik ICT Initiative Freight Distribution System feasibility Study" completed by Transmode Consultants Inc. provides a quick overview of the different transportation options available for the distribution of country foods within Nunavik including coastal boats and snow-trains. The only year-round reliable option is air transport.

All of the options require some storage between facilities located at the airports. Option #1 and #2 require considerably more air transport than Option #3.

OPTION 2: THREE REGIONAL FACILITIES:

This option was initially designed to address the large scale harvesting requirements for caribou, the concept being to herd the caribou to three sites to facilitate the inspection process. The requirement for the processing of other country food species resulted in the addition of extensive air transport support and the possible construction of small storage facilities in each village. The analysis of this option produced the following observations:

Advantages:

- 162.1 The capital facilities cost of this project are 15-20% lower than the other two options;
- 162.2 The per pound harvest costs for caribou are lower (20-40% less) than the two other options.

Disadvantages:

- 162.3 There will be few Inuit employed in the herding of caribou and the capital cost for herding (helicopters etc.) will be high;
- 162.4 This option does not provide the level of socio-economic development as do the other two options... 60-75% fewer jobs are created than with the third option;
- 162.5 The harvest and transportation cost for country food species other than caribou is higher than for the other two options;
- 162.6 The migratory patterns of caribou change and if there is a corresponding decrease in population, it is possible that there may be insufficient caribou to operate one or more of the facilities;
- 162.7 The cost of air transport is the highest with this option. Preliminary calculations show that air transport costs for country foods will amount to an average of almost \$2.00 per pound and if the savings in harvest cost is prorated across all country foods, the net average increase in cost would be about \$1.40 per pound more than the third option and about the same as the first option;
- 162.8 The harvest of country foods other than caribou will be problematic because of the lack of inspection facilities in each community; and
- 162.9 Excluding capital costs, only 30% of operating costs goes to salaries paid to Inuit.

OPTION 3: COMMUNITY PROCESSING CENTRES WITH A CENTRAL REGIONAL MARSHALLING FACILITY:

Option 3 evolves around 14 CPCs which do everything the handling and processing facilities would do in the first option. In addition the RMF will provide a range of quality management and

Advantages:

- 163.1 This option will provide the greatest level of employment which will be equally distributed in all communities. Option 3 attains the objective of creating the greatest number of employment opportunities for Inuit residing in all communities;
- 163.2 Air transport costs for country foods are eliminated except for those country foods: (i) shipped between communities to adjust for shortages and surpluses; or (ii) exported south;
- 163.3 This option produces the lowest, per kilogram, cost of country foods;
- 163.4 Excluding capital costs, 75-85% of operating costs will go to Inuit salaries; and
- 163.5 Capital costs are equivalent to option one and lower than option two.

Disadvantages:

- 163.6 Initial training costs are slightly higher than the first option; and
- 163.7 The implementation of this option would have equivalently the same degree of complexity and difficulty as the first option, but more than the second option.

April 1994

The role and function of the Regional Marshalling Facility is described in detail later in this

THE THREE OPTIONS AT A GLANCE

	OPTION ONE	OPTION TWO	OPTION TUDES
ADVANTAGES	- Simple handling facility implementation.	- Capital Facilities cost 15-20% less than the other two options Costs for caribou are 20-40% less than other options.	Provides greatest level of employment in all 14 Communities. - Inuit salaries are 75-85% of operating costs. - Air transport costs eliminated, except to adjust shortages and surplusses or export goods south. - Lowest per kilogram country food costs.
DISADVANTAGES	 Higher education requirement. Only two or three communities receive the majority of job benefits. Large amounts of handling requiring capital facilities at airports. fewer number of jobs created. 	 Few Inuit employed. High Capital costs. Changing herd population levels and migratory routes. High air transportation costs. Lack of inspection facilities in each community 60-75 % fewer jobs than recommended option 	 Training costs slightly higher than option one. Implementation complexity is the same as option one by more than option two. Capital costs are equivalent to option one but higher than option two.

RECOMMENDED OPTION:

- 164 After a review of the ICT objectives, policies and cost factors, the third option, which uses CPCs and the RMF is the preferred and recommended choice. The rational for this selection is:
 - 164.1 Lowest net total project cost;
 - 164.2 Lowest per pound wholesale price for country foods;

- 164.3 Highest level of employment creation for Inuit; and
- 164.4 There are no major disadvantages to this option.

RECOMMENDATION

The preferred handling and processing option includes 14 Community Processing Centres and a central Regional Marshalling Facility as this option best fulfils Inter-Community Trade's objectives, policies and cost factors.

PLANT SIZES AND GENERAL LAYOUT:

- 165 Considerable work was done by Makivik Corporation and Ministère de l'Agriculture, des Pêcheries et de l'Agriculture (MAPAQ) to thoroughly review all three existing facilities and identify the modifications and additions required in order to: (i) allow for MAPAQ's certification; and (ii) resolve some operational concerns.
- The design of these modified facilities as well as their equipment specifications and layout are contained in the detailed drawings prepared by HONCO and which can be viewed at Makivik Corporation's office in Lachine, Québec.

COMMUNITY FREEZERS:

- All of the Inuit communities in Nunavik are equipped with community freezers. The community freezers are used to ensure there are communal facilities to store: (i) surplus country foods harvested by subsistence hunters; and (ii) country food which is provided to the needy through the Hunter Support Program. The use of the community freezers is controlled by village councils, to varying degrees, but for the most part, people go in and out as they please.
- Many of the community freezers are in need of repair to the structure, and/or compressors. The possibility of using the existing community freezers for the ICT project was examined and rejected for the following reasons:
 - Subsistence hunters will always have a need for the community freezer. The hunt is seasonal and hunters need to have a location where they can store country foods that are in excess of the hunter's personal freezer storage capacity;
 - 168.2 Food inspection and certification regulations require that all of ICT's country foods be stored in certified facilities. The community freezers can not be certified because: (i) a portion of subsistence country foods stored in the freezer will not have been inspected; and (ii) the community freezers do not meet construction requirements;

168.3 The storage capacity of the community freezers is insufficient for ICT's requirements;

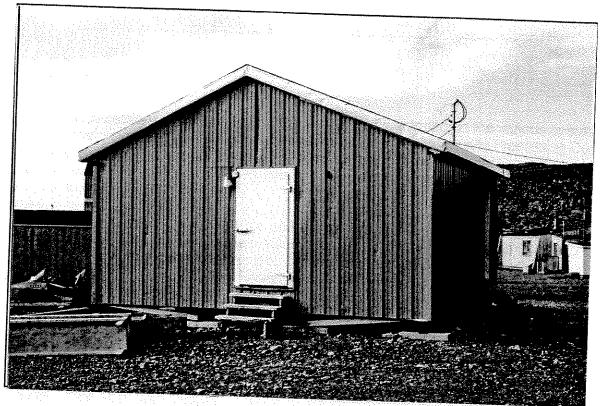


Figure 24: Community freezer.

168.4 The community freezers would have to be modified so that portions of the facility would also work as food coolers.

RECOMMENDATION

Community freezers must not be used by Inter-Community Trade for storage of processed meats. Each Community Processing Centre must have adequate internal freezer space.

SECTION TWELVE:

REGIONAL MARSHALLING FACILITY:

INTRODUCTION:

- The previous sections within this business plan have concentrated on the various operational requirements of the project and how they would be addressed by the Community Processing Centres (CPCs) and the Hunting, Fishing and Trapping Associations (HFTA). This section addresses the central coordination and support requirements that must be provided to support community processing centres.
- 170 The strength of the CPCs will be their ability to: (i) rapidly adjust to the harvest; and (ii) the requirement to put a quality product on the consumer's table. The major challenge to the CPCs in Nunavik will be similar to the one encountered by smaller processing centres across Canada, quality management. The Regional Marshalling Facility (RMF) must play a key support role to minimize potential problems and provide an avenue for CPCs to maximize opportunities.

REGIONAL MARSHALLING FACILITY, THE PURPOSE:

- 171 The concept of the RMF is more than just a large warehouse used to store and distribute country foods. The RMF also includes a wide range of management, sales and quality control functions that are required to support the CPCs. Discussions with Inuit organizations and government of the Inter-Community Trade (ICT) initiative for the following reasons:
 - 171.1 The services to be provided by the RMF, if provided independently in each of the 14 CPCs, would be prohibitively expensive;
 - 171.2 Services provided by the RMF are not required on a full time basis in each of the CPCs;
 - 171.3 The coordination required to move surplus country foods between villages (at the lowest per kilogram cost) is a central marshalling function to help ensure access to all communities;
 - 171.4 The gathering and coordination of all harvest monitoring information should be centralized to make the greatest use of the limited technical and scientific resources available to the project;
 - 171.5 A centralized service is more effective in buying bulk processing supplies and in obtaining quality services at a lower price than would 14 CPCs independently trying to procure their required supplies and services;

- 171.6 There is strength and coordination when one voice represents all of the communities vis-a-vis the government regulatory agencies; and
- 171.7 A uniform quality standard of country foods must be established so that consumers are assured of similar quality and value for all products they are buying. This can only be achieved through a centrally coordinated quality control and training programme.
- Regulatory agencies have also reinforced the need for a central marshalling facility that will cPCs are not responsible to a central marshalling facility, public safety would be jeopardised.

TRAINING:

- Quality control and consistency of the product being delivered to the consumer are of extreme importance to the success of the project. As with franchises, ICT must ensure consistency. The best way to achieve the desired quality standards is through a centrally managed training system. To this end, the RMF team must ensure appropriate training programs are developed to support and serve ICT's needs. By developing a training program and ensuring it is consistently applied in all of the communities, the hunters and CPC employees will all have a common training base.
- The training program must be developed in conjunction with the CPCs as well as the Ministère de l'Agriculture, des Pêcheries, et de l'Alimentation (MAPAQ) and the Department of Fisheries and Oceans (DFO). The training must reflect the needs and requirements of the project, the community, the trainee, and the regulatory environment within which the project must operate. As a result, ICT must work with: (i) Provincial and Federal training organizations; (ii) Makivik Corporation's training group; and (iii) the Kativik School Board which has an important training mandate in Nunavik.
- 175 The training program's effectiveness will be directly related to the success attained in explaining the reasons and principles behind the required practices and procedures. Adult education to memorize something or do something without having first been explained why.
- 176 Equally important to initial employee training is ongoing job training and upgrading. In support of this activity, ICT must develop a range of videos which explain job requirements, and how they should be accomplished. The initial cost of producing these videos will be offset, over time, through being delivered.
- 177 The complexity of the training requirement, the annual program maintenance, and the number of people involved in training within Nunavik, dictate that initial annual ICT training workshops of two days duration be held to address initial training issues. The importance of training to the project must not be underestimated.

RECOMMENDATION

It is necessary to conduct annual training seminars to address training issues.

REGULATORY AGENCIES:

- One of the most difficult aspects to be faced by the communities, in the operation and maintenance of their processing centres, will be dealing with a range of inspection and certification regulations, that must be addressed and respected. The interpreting of regulations can be a time consuming and expensive process if undertaken at each CPC.
- Supporting the 14 CPCs, the RMF can allocate the resources needed to resolve regulatory issues. Fourteen individual CPCs will be divided on how they should resolve problems and address issues. Each community will have but a small voice when they address the regulatory agencies. The RMF, on the other hand, represents all of the communities and will have staff qualified to address the issues.
- 180 Makivik Corporation has established excellent working relationships with DFO and with MAPAQ's regulatory officials. ICT must take advantage of this opening created by Makivik Corporation for the benefit of all of the CPCs and ICT as a whole.

QUALITY MANAGEMENT PLAN:

- As part of its moral and contractual obligations to the CPCs, ICT must provide a centre of expertise to assist in all technical aspects of quality management and production research. These services, will range from: (i) facility inspections; (ii) the resolution of facility production and design issues; and (iii) the effective coordination of activities so as to keep the number of technical staff to a minimum.
- 182 ICT's point of vulnerability will be if there is a lack of quality control standards. The RMF, in conjunction with the regulatory authorities, must have the authority, if it believes that the quality of the country food is doubtful to:
 - 182.1 Stop a CPC's operation;
 - 182.2 Refuse to procure country foods from a CPC;
 - 182.3 Not allow the sale of poor quality country foods to other CPCs; and or
 - 182.4 Stop a sale of country food to the export market.

- This is a very complex issue and the agreements between the RMF and the CPCs will have to be thoughtfully and carefully prepared. The regulatory agencies will have to be part of the process to ensure that all of the certification and inspection issues are fully addressed.
- Quality Management Plan (QMP) is the term used by DFO to describe the document that it requires to be prepared for the operation of all DFO certified facilities. We have taken this concept and expanded it for the entire operation of all of the CPCs. The QMP to be developed for the ICT project will become the operational manual for all CPCs. Some of the more important sections to be included within this document are:
 - Production Processes: A detailed description of the flow of product through the facilities and the transformation processes that are to be applied at each food processing work station within the CPCs;
 - 184.2 Facilities Operation: The maintenance and use of all major equipment systems such as the heating, cooling and freezing equipment;
 - 184.3 Cleanliness and Sanitation: The personal and processing cleaning and sanitation processes required during operations and when changing from one country food species to another;
 - 184.4 **Inspection:** Specify the inspection process and controls including the hunters as well as the inspector and the processing employees; and
 - 184.5 **Training:** Identify the different training and employee certification programs and the role of the regulators. Also to be included are the training requirements for each employee and contractual working on the project.

MARKETING AND DISTRIBUTION EXPERTISE:

- The ICT project will assist all 14 communities with the marketing of country foods, as well as the coordination and distribution of surplus country foods to other communities. To best use limited resources, keep project costs within acceptable levels, and to have a total overview of the regional country food surpluses and demand requirements, it is necessary to provide a centralized control. This function is even more important once the cost of air transport is factored into the equation.
- During the third or fourth year of operation, the ICT project will likely attain a production level that exceeds the Inuit's consumption and demand requirements. At this point, ICT may commence the export of caribou outside of Nunavik. The role of the RMF must then increase to include marketing and distribution functions outside of Nunavik.

SUMMARY:

The RMF is essential to the operation and success of the ICT initiative. This facility will provide the expertise required to maximize centralized profits and ensure long term project viability. The savings and benefits that will accrue through the RMF (versus each CPC doing everything for themselves) are:

- 187.1 The cost of technical expertise will be about twenty five person years less for a total annual savings of about \$1.8 million;
- 187.2 Increased effectiveness in dealing with regulatory agencies;
- 187.3 Lower operating costs through the centralized procurement of supplies and spare parts. Savings are estimated at \$20,000 per facility for a total annual savings of about \$280,000 per year;
- 187.4 Lower cost of country foods through controlled inventory and transportation management, about \$0.80 per kilogram less; and
- 187.5 A financially viable export market achieved through the centralized marshalling and sales operations of the RMF.

RECOMMENDATION

Kujjuuaq seems, at this time, to be the ideal location for the construction of the Regional Marshalling Facility because: (i) it is centrally located in relation to the other communities; (ii) it is farther south than most communities; and (iii) it has a landing strip capable of handling large jets.

It is recommended that the site for the Regional Marshalling Facility not be selected for a year or two so that a better understanding of the project's logistics requirements is attained.

SECTION THIRTEEN:

TRAINING, THE ULTIMATE PRIORITY:

INTRODUCTION:

188 Training is probably the single most important factor within the initial start-up and implementation of the Inter-Community Trade (ICT) project. There is no amount of money or political will that can make the project successful without well trained employees. Almost everyone involved with the development of this business plan has noted that: (i) training must be well planned; and (ii) that the implementation of the project must not exceed the pace with which training can be provided.

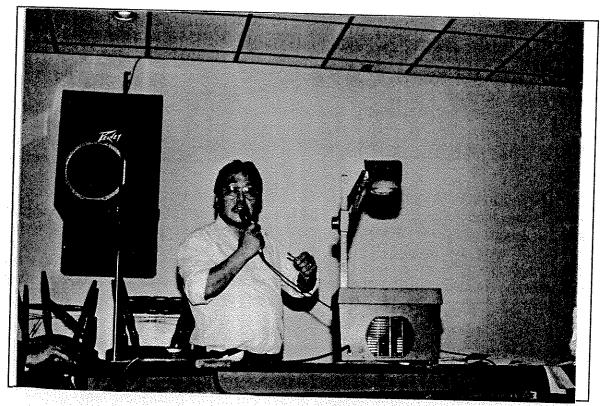


Figure 25: Training is essential.

HUNTER INSPECTION CERTIFICATION COURSE:

Opening discussions about the hunter inspection certification course raised many eyebrows in Inuit communities because their initial understanding was that they were going to be taught to hunt, much in the same manner as the Ministère du Loisir, de la Chasse et de la Pêche (MLCP) requires southern hunters to take a course before receiving the hunting license. This misunderstanding was

corrected when it was explained that the inspection process requires hunters be instructed in a range of techniques and skills to ensure the harvest delivered by the hunters to the CPCs will be accepted by the inspector. We recommend this course be offered through ICT, with certification being provided by a regulatory agency.

RECOMMENDATION

Hunters should undergo a certification course to ensure the proper techniques are used when harvesting the wildlife species.

MEAT PROCESSING EMPLOYEE TRAINING COURSE:

- 190 Given that both socio-economic priorities and cost effectiveness analysis issues point towards training Inuit to process country foods, discussions were held with training specialists in food processing as well as specialists who have been involved in training Inuit. A consensus was quickly formed that the portion of the Inuit population most likely to seek employment as food processors would likely be very well suited to the training requirements, and would have a very high success rate in completing the training programs.
- The financial analysis presented 15 June 1993 and presented in the annex of this document included the analysis of training costs for processing employees. Training costs were divided into two categories, capital and non-capital. Capital training costs are those training costs associated with training an individual to qualify for a new job. Within the ICT project, this would include training individuals with little or no commercial food processing experience to become qualified food processors. Upgrading and on-the-job training are not considered as capital training costs but rather ongoing training expenses attributable to regular operating expenses.

RECOMMENDATION

Meat processing employees should undergo initial and on the job training to ensure both regulations and safety requirements are met.

TRAINING COMMUNITY PROCESSING CENTRE MANAGERS:

Subsequent to discussions held with human resource specialists it was determined that there is currently a shortage of qualified lnuit to undertake the management of the community processing centres (CPCs). The position of community processing centre manager requires: (i) an in-depth

knowledge of food processing and the associated inspection and certification regulations; (ii) a sound knowledge of basic equipment maintenance; (iii) the ability to direct and manage people; (iv) basic knowledge of management and accounting principles; and (v) a good understanding of personnel management.

- The training should focus on adult learning principles, including the use of workshops and case studies that are appropriate to their needs. The CPC managers should also attend at a minimum the regulatory and quality management portion of the food processing course developed for the meat processors and the hunter inspection certification courses. Once one or two of the CPCs are operational, all new managers should gain practical hands-on experience by working at existing CPCs, prior to employment in their respective communities.
- Regardless of the level of training to be provided, the more complex production performance measurement and through-put analysis will have to be provided by individuals employed at the Regional Marshalling Facility (RMF). The challenge facing the community processing managers will be difficult but interesting.

RECOMMENDATION

Community Processing Centre managers should be certified under both the hunting course and the meat processing course, as well as have basic maintenance and management skills.

INSPECTOR TRAINING:

- Discussions with Ministère de l'Agriculture, des Pêcheries, et de l'Alimentation (MAPAQ) to create inspector positions for Inuit has been quite promising. While acknowledging that some academic schooling as well as considerable practical hands-on training will be required to undertake the job of inspector, it was felt that most Inuit, because of their cultural upbringing and traditional skills, had the understanding of animal anatomy which would give them a good start over many others wanting to become inspectors. MAPAQ's interest in training Inuit inspectors was also one of cost consciousness. Inuit inspectors residing in Nunavik would cost less to maintain than sending inspector's from the south and having to pay their travel and living costs.
- 196 The cost of training the Inuit inspectors is the responsibility of the province of Québec. MAPAQ is examining the cost and operational implications of this training program. Initial results are quite promising.

RECOMMENDATION

Inuit inspectors should be trained and certified by the Ministère de l'Agriculture, des Pêcheries, et de l'Alimentation.

TRAINING COSTS:

197 Training costs were presented on 15 June 1993 to Makivik Corporation and a large number of Federal and provincial government representatives. The total capital costs, over the five year implementation of the project, is estimated to be as follows:

ESTIMATED TRAINING COSTS

Hunter Inspection Certification:	\$ 250,000
Meat Processing Employees:	\$1,800,000
Community Processing Centre Manager:	\$ 450,000
Sub Total: ⁴⁷	\$2,500,000
Inspectors:	\$ 900,000
TOTAL:	\$3,400,000

RECOMMENDATION

Formally request funding assistance from the province of Québec for the \$2,500,000 for Inuit training costs.

RECOMMENDATION

The province of Québec train Inuit inspectors at a cost of \$900,000.

The sub-total of \$ 2.5 million is the funding required by the project. The \$ 900,000 for inspectors is an estimated internal cost to MAPAQ to train the Inuit inspectors.

SECTION FOURTEEN:

MONITORING AND INFORMATION MANAGEMENT SYSTEM:

INTRODUCTION:

As previously noted, monitoring is a part of the conservation management process which looks at tracking and measuring the harvest of country foods. Monitoring is essential because it, along with wildlife population counts and other management practices, allows for the determination of the health and well being of the various species. Monitoring will, through sampling and measurements taken: (i) identify certain health problems before they become wide spread; (ii) specify how well a species is eating; and (iii) identify how well the species is able to propagate itself and maintain a healthy

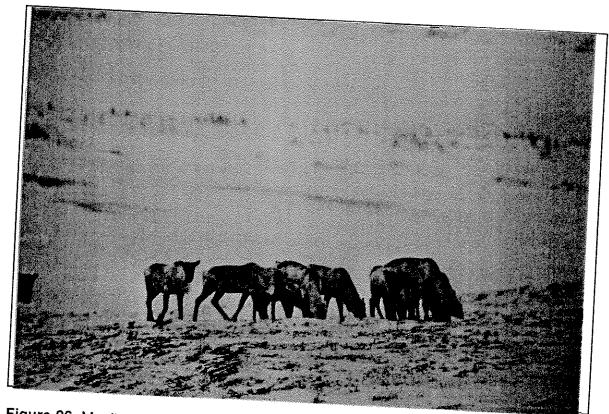


Figure 26: Monitoring Survey.

199 Monitoring, however, is but one component of the entire information system required for the effective operation and management of the Inter-Community Trade (ICT) initiative. The ICT

Information System must address all of the project's information needs including the following major information requirements:

- 199.1 **Project Planning and Management:** The project planning and management system must use information from within the existing information base:
- 199.2 **Inventory System:** This system, tied to the monitoring system, must provide country food inventory information about each Community Processing Centre. This is also tied to the hunter pay system;
- 199.3 Natural Resource Database: This database must store country food species data collected, and allow for information to be analyzed by resource specialists;
- 199.4 Transportation Versus Storage Model: Some country food will be immediately consumed in the villages; some will be frozen for future consumption; and some will be shipped to other communities for their consumption or export elsewhere. There is a requirement for a computer based model which, when connected to the inventory system in each village, is capable of identifying the most economical cost options within each village and for the project as a whole;
- 199.5 Accounting and Administration: An accounting system is required which: (i) works within the operational requirements of ICT; (ii) provides real-time information; and (iii) provides the ability for financial and operational audits; and
- 199.6 Financial Management: This part of the system must provide management with timely and accurate information to enable proper financial management of the project.
- The information management and monitoring requirements of the ICT initiative must be fully information requirements of the scientific and conservation community. Integrating various the collation and analysis required to produce required reports.

RECOMMENDATION

Resources must be allocated to develop an integrated information management system that also responds to the monitoring requirements of the Inter-Community Trade project.

SECTION FIFTEEN:

INTER-COMMUNITY TRADE, THE CORPORATION:

INTRODUCTION:

Nunavik wildlife is seen as a resource belonging to the Inuit population as a whole. The Inuit want the wildlife to benefit the entire population and not just a select number of individuals. This in turn dictates that the population must own and substantially control the Inter-Community Trade (ICT) initiative. This includes benefiting from the future profits that will be generated.

The Inuit must also hold and maintain control of the socio-economic aspects of the project so that ICT does not become profit motivated at the sake of the founding principles and job creation. The structure of the project thus becomes a critical element of its success.



Figure 27: Conservation for future generations.

ORGANIZATION AND OWNERSHIP:

- An entire range of ownership and responsibility options were examined to identify the most appropriate solution. The requirement for 14 Community Processing Centres (CPCs), and the Regional Marshalling Facility (RMF), along with the ownership structure were central to the analysis of the different ownership options. The more viable options examined included:
 - 203.1 **Cooperatives;** The principle advantage is that the community as a whole is involved in the management of its CPC thus ensuring, to an extent, that the needs of the community are placed before that of select individual(s). Community ownership is also the weakest point of a cooperative. If Responsibility is spread over too many people, decisions are difficult to make and no one takes responsibility for major problems:
 - 203.2 Private Ownership: The CPC are owned by one or more individuals. This option has general opposition because country foods are to be shared by all Inuit and are not for the profit of specific individuals. Private ownership also means that profit, not employment, becomes the focus of the owners with the socio-economic benefits soon becoming of secondary importance; and
 - 203.3 **Public Ownership:** The facilities would be operated like a publicly owned corporation. The initial appeal of this option is the financial stability that Makivik Corporation can provide. An examination of the need for the Inuit population's participation along with Makivik Corporation's desire to have ICT operate as a separate independent entity, make this a somewhat less desirable operation.
- The analysis of ownership options includes the identification of the different funding sources and the portion of ownership each is to retain. While government financial and operational support of this project is acknowledged and essential, equally important is the requirement that Makivik Corporation contribute funds and provide operational support to ensure the project's success. Some of Makivik Corporation's planned contributions include:
 - 204.1 Financing a portion of the capital costs for facilities and training;
 - 204.2 Assisting with inventory and bridge financing costs;
 - 204.3 Providing direction and support during project start-up implementation and negotiations with the different government departments and agencies; and
 - 204.4 Providing a central policy and coordination function because of its unique position and role within Nunavik. A few of the many activities Makivik Corporation must undertake are:
 - The identification and acquisition of land required to construct facilities;
 - Obtaining the provincial, regional and municipal certification, permits and licences required to operate the project; and
 - 204.4.3 Contracting for the consultant and construction services required to implement the project.

- 205 A number of other important considerations that also impact upon the ownership and management structure are:
 - 205.1 The requirement for a centrally coordinated monitoring effort, so conservation management issues can be addressed from a position of strength and knowledge;
 - 205.2 Quality management as well as inspection and facilities certification must be coordinated; and
 - 205.3 The policies and principles of ICT must be addressed and protected.

OWNERSHIP STRUCTURE:

- An analysis of the different ownership options was performed and it was soon evident that none of the traditional management models was applicable to ICT. It was decided that an ownership and management model would have to be developed which provides for the uniqueness of ICT. The recommended ownership structure is as follows:
 - 206.1 Makivik Corporation initially has 100% ownership and later becomes a minority shareholder: Makivik Corporation initially owns the CPCs. Once a community processing centre becomes operational, the facility would be handed over to the community with Makivik Corporation retaining:
 - 206.1.1 Minority ownership based on the weighted average of the capital investment Makivik Corporation made into the facility; and
 - A mortgage on the facility equal to the inventory financing that Makivik Corporation will make for each facility's start-up.
 - 206.2 The CPCs are majority owned by the community landholding corporations: The land holding corporation option was selected over other community and municipal organizations because the CPCs would always be owned and controlled by the Inuit. The landholding corporations are directly involved with the municipal councils and the HFTAs so they would be in an ideal situation to provide local management to the facilities; and
 - 206.3 RMF owned by Makivik Corporation as an Independent Corporation: Makivik Corporation should retain ownership of the RMF and place its minority holdings of the CPCs with the RMF. This structure allows for Makivik Corporation to continue to play a strong central socio-economic role.

MANAGEMENT STRUCTURE:

- The management structure for the ICT project must be developed so that it is:
 - 207.1 Complementary to the Corporate Structure:

The management structure's organizational hierarchy must reflect the organizational structure so that maximum corporate synergy and effectiveness is attained;

- 207.2 <u>Appropriate to the Operational Requirements of the Project:</u>
 The planning, management and coordination activities along with the control systems must support the ICT project and not vice-versa: and
- 207.3 Relevant and Integrated Into the Traditional Self-Government Structures:

 The existing self-government and administrative structures must be acknowledged and respected within ICT's management structure and processes.
- 208 The components of the recommended management structure are as follows:
 - 208.1 Board of Directors;
 - 208.2 Board of Elders;
 - 208.3 Corporate Management and the Regional Marshalling Facility; and
 - 208.4 Community Processing Centres.

BOARD OF DIRECTORS:

- 209 The Board of Directors for ICT must include all of the major shareholders in the project including:
 - 209.1 **Makivik Corporation:** With about 25% of the CPCs and 100% of the RMF, Makivik Corporation will own about 30% of the capital value of the ICT project and thus should have about 30% of the seats on the Board of Directors.
 - 209.2 Community Processing Centres: Each CPC management team should have one representative on the Board of Directors.
 - 209.3 **Board of Elders:** The executive members of the Board of Elders should be on the ICT's Board of Directors.
 - 209.4 **Corporate Management:** The president of ICT should be a member of its Board of Director's.
- The mandate of the Board of Directors must mirror that of any corporation, to ensure that the ICT corporate management team appropriately addresses the profitability and the long term viability of the project.

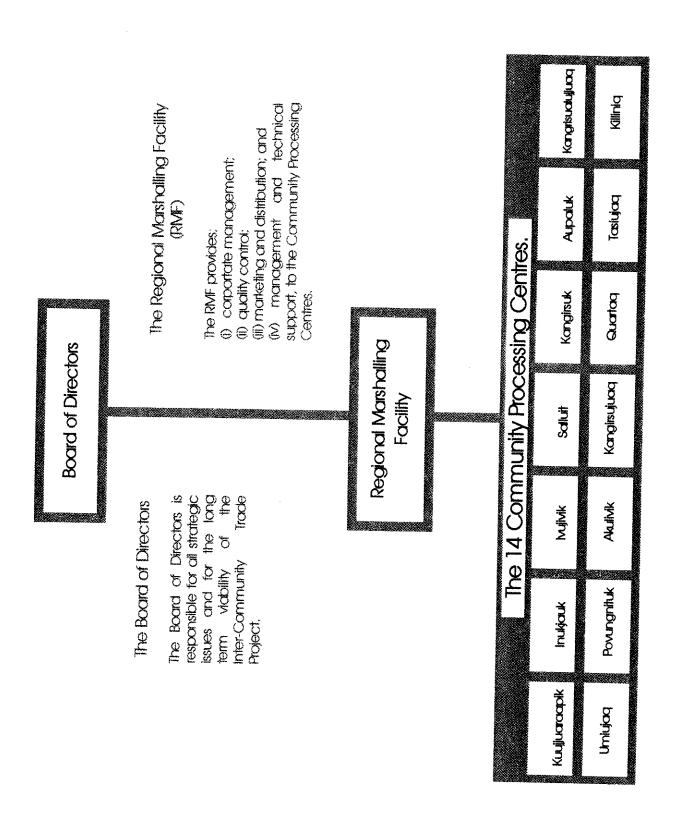
CORPORATE MANAGEMENT AND THE REGIONAL MARSHALLING CENTRE:

211 The corporate management function is central and key to the entire project. The principle elements include, but must not be restricted to the following:

- 211.1 Corporate Planning: To develop and maintain the corporate plan which identifies all project activities and responsibilities for their completion. The project complexity and the limited windows of opportunity available for the sea-lift dictates that the planning function will always be a primary role. The corporate plan is presented to the board for approval. Once approval is received, the corporate plan then becomes the operational mandate;
- 211.2 **Operational Mandate:** This becomes the guide for corporate management to undertake its detailed activities which include entering into agreements for a wide range of functions. The corporate mandate must identify clear deliverables as well as objectives, goals and the budget with which corporate management must complete their agreed upon mandate;
- 211.3 **Fund Raising:** The corporate management team must assume responsibility for raising funds to help finance various aspects of the project. The role of executives within Makivik Corporation and their responsibility to be the primary contact with the political levels of government, requires this function to be closely coordinated:
- 211.4 **Quality Management:** Quality control is central to the success of this project. Therefore, the RMF must posses, and be acknowledged, as the body of authority in this area;
- 211.5 Coordination and Distribution: Marshalling ensures the storage and distribution of country foods between villages that have surpluses, to villages which have shortages. This includes negotiating and scheduling air transport; and
- 211.6 **Technical and Management Support To Community Processing Centres:** The corporate management team must employ and or contract management and technical expertise to support the CPCs.

A sophisticated 'open architecture' project planning tool must be used by corporate management to identify all of the project activities, resource requirements, costs and inter-activity relationships and dependencies. This tool must be integrated into the project's information management system as well as becoming the format used to inform everyone on the projects advancement and status.

⁴⁹ It is most important that the Board of Directors ensures the planning function be in corporate management's top three priorities. Planning is not as glamorous as other activities and many organizations eventually fail because of inadequate planning.



BOARD OF ELDERS:

- There are a number of economic development, employment and conservation policies that have been identified and which impact upon the direction and management of ICT. The idea behind the Board of Elders is to provide a moral conscience to the ICT initiative, and when required, organize public pressure to ensure ICT respects its socio-economic obligations to the Inuit community.
- The mandate of the Board of Elders must specifically state their non-participation in the day to day decision making or operation of ICT, and that they are not to replace the Board of Directors. The Board of Elders must however be given with the authority to challenge ICT's corporate management should they not respect the guiding principles and policies.
- A very important part of the Board of Elders mandate should be to identify potential problems that the ICT project may encounter. The elders are well positioned to see, and hear, upcoming problems and opportunities within their villages. The Board of Elders can then knowledgeably advise ICT on how to best handle the situation.
- The selection of the Board of Elders should be based upon one elder per village. The Board of Elders should also have a three to five member executive which automatically become members of the Board of Directors.

ADVISORY COMMITTEE:

The ICT project must perform a wide range of functions, ⁵⁰ many of which are not typical of a commercial venture. ICT must also work hand in hand with a number of government funding and regulatory agencies that have an immediate and direct impact upon the success and viability of the project. In addition to members of the Board of Elders and the Board of Directors, the Advisory Committee should also include the following (presented in alphabetical order):

216.1 Funding Agencies:

216.1.1	Canadian Aboriginal Economic Development Strategy (CAEDS), ISC;
216.1.2	Department of Fisheries and Oceans;
216.1.3	Federal Office Regional Development (FORD), ISC; and
216.1.4	Province of Québec for Training.

216.2 Regulatory Agencies:

216.2.1	Department of Fisheries and Oceans;
216.2.2	Ministère de l'Agriculture, des Pêcheries, et de l'Alimentation:

Socio-economic and job creation activities as well as providing country food products at the lowest reasonable cost are not objectives that a purely for profit organization would embrace.

216.2.3 Ministère du Loisir, de la Chasse et de la Pêche;

216.2.4 Environment Québec; and

216.2.5 Agriculture Canada. 51

- 217 The Advisory Committee, which should meet semi-annually for the first three years and annually thereafter, must perform two essential functions:
 - 217.1 Provide a forum for all of ICT's partners and associates to discuss the project and identify ways to addresses issues and concerns; and
 - 217.2 Inform members on the progress of the project, including how their own individual contributions fit within the project as a whole.
- 218 The mandate of the Advisory Committee must be one of providing advice. It is the role of ICT's corporate management and its Board of Directors to use the advice to the project's best advantage.

DECISION MAKING PROCESS and CORPORATE MANAGEMENT'S AUTHORITY:

- The success and viability of the ICT initiative is dependent upon the authority with which corporate management can make decisions. The Board of Directors, the Board of Elders, the Advisory Committee and other groups must not get drawn into the day to day management of ICT. Corporate management must be given direction by its different boards, and the boards must provide corporate management with the authority and funds to get the job done.
- After its corporate plan has been accepted by the boards, corporate management must have the authority to undertake all approved activities without seeking additional approvals. Corporate management must be able to sign contracts, distribution agreements, and make day to day operational decisions without being required to obtain executive approval from Makivik Corporation and/or the Board of Directors.
- The Board of Directors must, however, perform its mandate as designed and corporate management must not be given unlimited powers. For all major changes to its operating mandate, as well as changes to the budget which will result in project cost over-runs, corporate management must be required to seek board approval. Corporate management must be allowed to move budgeted money between activities to adjust for changes in price and scope, conditional upon the budget total not being exceeded.

Agriculture Canada should form part of the advisory committee if it is felt that export outside of Québec may occur.

REGULATORY AGENCIES:

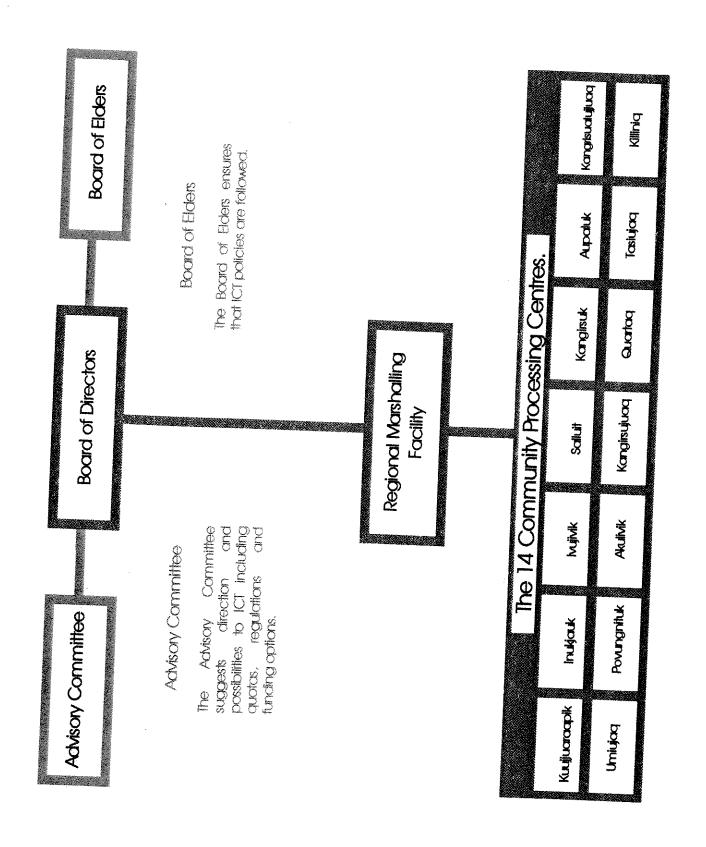
- ICT will have to work and cooperate with the various regulatory agencies that control inspection and quotas. The agencies have a regulatory role which has a direct impact upon the RMF and all 14 CPCs. The primary regulatory agencies are:
 - 222.1 Department of Fisheries and Oceans;
 - 222.2 Ministère de l'Agriculture, des Pêcheries, et de l'Alimentation;
 - 222.3 Ministère du Loisir, de la Chasse et de la Pêche;
 - 222.4 Environment Québec; and
 - 222.5 Agriculture Canada.

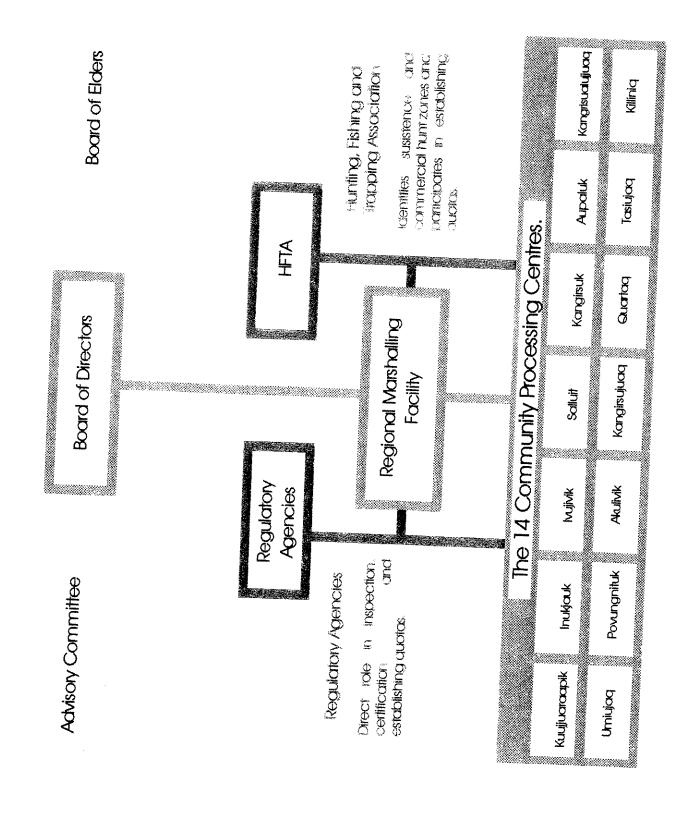
HUNTING, FISHING AND TRAPPING ASSOCIATION:

The Hunting, Fishing and Trapping Association (HFTA) is responsible for the designation of subsistence and commercial hunting zones in each of the communities. The HFTA also has an important role in the establishment and negotiation of quotas with the regulatory agencies. The HFTA has a direct impact upon the RMF and the 14 CPCs.

April 1994

The subsistence harvest area is reserved for subsistence hunters thus making it necessary for the HFTA to enforce the different zones so that the commercial hunt does not occur in the subsistence areas.





PART SIX:

PROJECT FINANCIAL VIABILITY:

SECTION SIXTEEN: PROJECT FINANCIAL VIABILITY:



Figure 28: Pointing to the future.

SECTION SIXTEEN:

PROJECT FINANCIAL VIABILITY:

INTRODUCTION:

- "Project Financial Viability" is defined as Inter-Community Trade's (ICT) ability to generate sufficient funds to: (i) pay all operating and related expenses; and (ii) to place money into a capital reserve fund to maintain and upgrade ICT's capital facilities and equipment. Project financial viability is generally determined by examining pro-forma income statements for a five year period so as to determine the long-term income trends of the ICT project.
- 225 This section of the business plan addresses how costs and values were determined for the following:
 - 225.1 Operating expenses and capital costs;
 - 225.2 Throughput variables used to measure and estimate productivity;
 - 225.3 The wholesale pricing structure;
 - 225.4 Financial and income analysis;
 - 225.5 Financial viability of ICT; and
 - 225.6 Sensitivity analysis of the income statements and production information.

METHODOLOGY:

The approach taken within this business plan has been: (I) be conservative when estimating revenues; (ii) always assume higher rather than lower costs; and (iii) include but a few of the byproducts for revenue generation as some by-products will require more work and pilot projects before they can be successfully commercialized.

ACCOUNTING PRACTICES:

- Standard accounting practices were used. All capital costs are identified, and no assumptions are made about the use of facilities and or equipment that may be available from other sources. A capital reserve account is identified to cover the cost of future capital costs.
- All revenues and production figures are conservative as lower than expected wholesale prices, and higher than anticipated production costs have been used to forecast income. Project implementation is assumed to take 33% longer because of the high level of training required. Production through-put, in the community processing facilities, was also estimated conservatively

because of fluctuating harvests and varying arrival rates of seal and caribou at the Community Processing Centres (CPCs).

OPERATING EXPENSES:

- Operating expenses were determined by interviewing processors and obtaining quotations from a number of potential suppliers. The main items are:
 - 229.1 **Employee Salaries:** The plant manager, food processor, bookkeeper and maintenance personnel costs were established by examining salaries currently paid to individuals by Makivik Corporation Inc., government agencies and the private sector. To this was factored the high cost of living in the north.
 - Salaries vary between \$15 and \$18 dollars an hour during year one.
 - 229.2 **Hunters:** Hunters would be contracted to provide seal, caribou and other wildlife species on a per pound basis. The price to be paid to the hunters was based upon the price currently paid the Hunter Support Program (HSP).
 - Hunters would be paid between \$0.85 to \$1.25 per pound of meat for seal and caribou, depending on quality.
 - 229.3 Air Transport: Transportation costs were discussed with air transport specialists. The high volume of country foods that will have to be transported allows for large volume discounting and aircraft chartering.
 - Air transport would be about 30-50% of current established commercial cargo rates, depending upon urgency, weight, and distance.
 - 229.4 Repair, Maintenance and Upkeep: Representatives of HONCO Construction Inc. and the owners of similar structures in Nunavik were interviewed and prices established.
 - Repair rates vary according to age etc. and are presented in the detailed financial analysis.
 - 229.5 Packaging and Supplies: Prices were obtained on the basis that bulk buying would be done for all of the CPCs.
 - Packaging and supplies will be about \$2.50 per seal and \$8.00 per caribou processed.

Daga 400

Within Nunavik, the imperial measurement system consisting of pounds and miles is used more than the metric system.

CAPITAL COSTS:

230 Makivik Corporation Inc. has constructed three prototype facilities and equipped each site for processing. Detailed as built costs were used to determine future construction and equipment capital costs. The 1993 dollar cost for each new CPC would be:

230.1 Plant: \$540.000

230.2 Processing Equipment: \$120,000

230.3 Harvest Transport Containers: \$ 40,000

PRODUCTION THROUGHPUT VARIABLES:

Information was gathered from different training and plant processing sources as to the production throughput variables that could be used to determine production possibilities and costs. To this were added factors such as the time to fully train employees and the amount of meat produced from each caribou and seal. This information was then used to compute production and operation costs.

These costs and factors decrease over time as the community processing centres become more efficient. Detailed figures are provided in the detailed financial analysis. One example is that the time to process a caribou is reduced through efficiency improvements by 40% over three years.

WHOLESALE PRICING STRUCTURE:

- The country food wholesale prices (at the CPC) used within the business plan were derived from a number of different considerations:
 - 233.1 The CPCs must sell their products at a price which allows each facility to operate profitably;
 - 233.2 The price paid hunters for their harvest must be sufficient for them to earn their livelihood; and
 - 233.3 The price paid for country foods by consumers (wholesale plus retail mark-up) must be less than what is paid for equivalent country foods.
- 234 The wholesale prices that are established are:

234.1 Seal: \$7.00 /kg ⁵

Until the seal processing feasibility study is completed, the exact cuts and their market value will not be known. The aggregate value is \$7.00 per kg with prices probably fluctuating between \$5.00 and \$8.50 per kg depending upon the cut.

234.2 Caribou:

\$11.00 /kg (prime cut)

\$ 5.00 /kg (non-prime cut)

234.3 Note: These prices are at the door of the CPC and do not include any air transport

or other mark-ups.

SENSITIVITY ANALYSIS FACTORS:

235 A sensitivity analysis was performed on each of the six scenarios. The sensitivity analysis studied the impact a \pm 10% variance might have on income and project viability. factors that were examined include:

- 235.1 Wholesale price of country foods;
- 235.2 Harvest variance to established quotas;
- 235.3 Rate of inflation;
- 235.4 Interest rates;
- 235.5 Seal harvest quota; 56 and
- 235.6 Caribou harvest quota.
- Each of the six factors were examined singularly and in combination to determine how they 236 would impact upon the financial viability of the project. Variances of plus and minus 10% were used to compute the impact upon income.
- Of the six factors upon which the sensitivity analysis was performed, only two were found to 237 have an appreciable impact upon income:
 - 237.1 Wholesale price of country foods; and
 - 237.2 Harvest variance above and below established quotas;

ICT will not be in the business of retailing country foods thus making the use of wholesale prices necessary.

A quota for ringed seal has not yet been established. 20,000 has been used as a planning figure for the preparation of the business plan.

FINANCIAL VIABILITY ANALYSIS:

- 238 Income statements and detailed financial analysis were produced for each of the six scenarios:
 - 238.1 A CPC that only processes seals;
 - 238.2 A CPC that only processes caribou;
 - 238.3 A CPC that processes seal and caribou;
 - 238.4 Summary of the 14 CPCs;
 - 238.5 The RMF; and
 - 238.6 The project as a whole.

239 Sensitivity analysis was performed on each of the six scenarios. The results demonstrated that the project is financially viable and that each CPC is viable unto itself. In summary it was found that;

239.1 A CPC that only processes seal:

- 239.1.1 This option is financially viable in that even with a -10% variance, the seal processing facility starts making a profit during its third year of operation and will have paid its operating deficit by its fifth year of operation.
- 239.1.2 The facility would lose its financial viability if the sensitivity variance were to descend to -21%. At this level the seal processing CPC would stop having a negative income in year 5 of operation and continue to operate at an annual break-even point.
- 239.2 Two graphs are presented on the following pages. These graphs summarize the financial analysis presented in Volume Two of the Business Plan:
 - Summary Income Statement: This chart shows the forecasted income for (scenario name). Depicted are three income curves, showing the sensitivity analysis variances of: (i) +10%; (ii) 0%; and (iii) 10%.
 - 239.2.2 <u>Summary Cumulative Income Statement:</u> This chart shows the forecasted cumulative income for the (scenario name).
 - The top curve shoves cumulative income with capital funding received from the Federal and Québec governments; and
 - 239.2.2.2 The bottom curve shows cumulative income if capital funding assistance is not received.

CONCLUSION

The Community Processing Centres processing only seals generates a lower level of income than a Community Processing Centre which processes caribou, however, it is ecomonically viable.

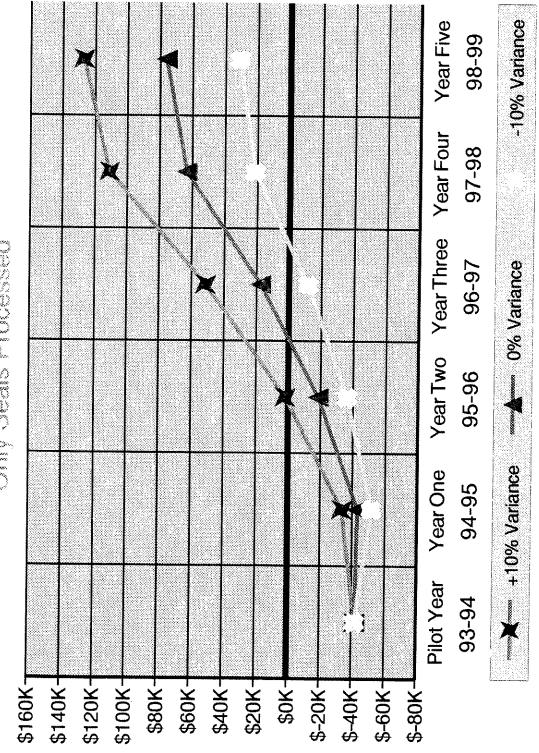
April 1994

E:--: =

Summary Income Statement

ncone With Capital Funding Assistance (Before taxes)

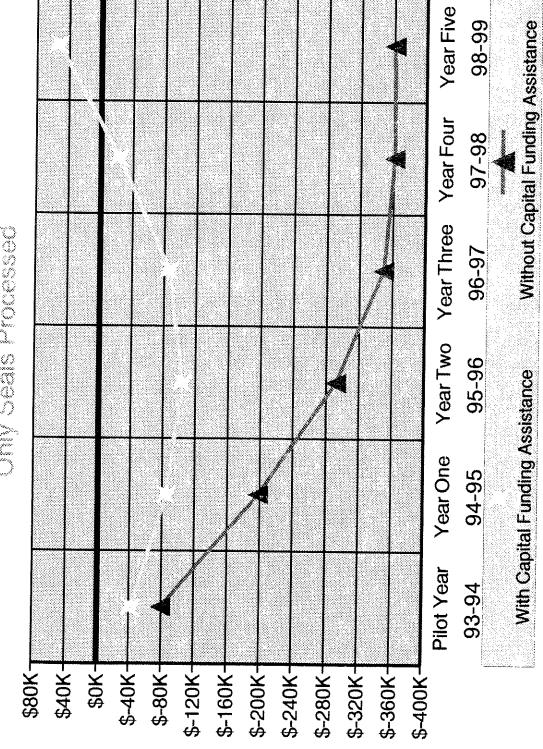
One Community Processing Centre



O% Variance (Before taxes)

One Community Processing Centre





239.3 A CPC that only processes caribou:

- This is the most profitable of the different CPC processing scenarios. This option starts generating a positive income early in its second full year of operation and by the end of its third year of operation will have paid its operating deficit.
- The scenario would lose its financial viability if the sensitivity variance were to descend to about -29%. At this level the caribou processing CPC would stop having a negative income during it's fifth year of operation and continue to operate at an annual break-even point.
- 239.4 Two graphs are presented on the following pages. These graphs summarize the financial analysis presented in Volume Two of the Business Plan:
 - Summary Income Statement: This chart shows the forecasted income for a CPC that only processes caribou. Depicted are three income curves, showing the sensitivity analysis variances of: (i) +10%; (ii) 0%; and (iii) 10%.
 - 239.4.2 <u>Summary Cumulative Income Statement:</u> This chart shows the forecasted cumulative income for the caribou processing CPC.
 - 239.4.2.1 The top curve shows cumulative income with capital funding received from the Federal and Québec governments; and
 - The bottom curve shows cumulative income if capital funding assistance is not received.

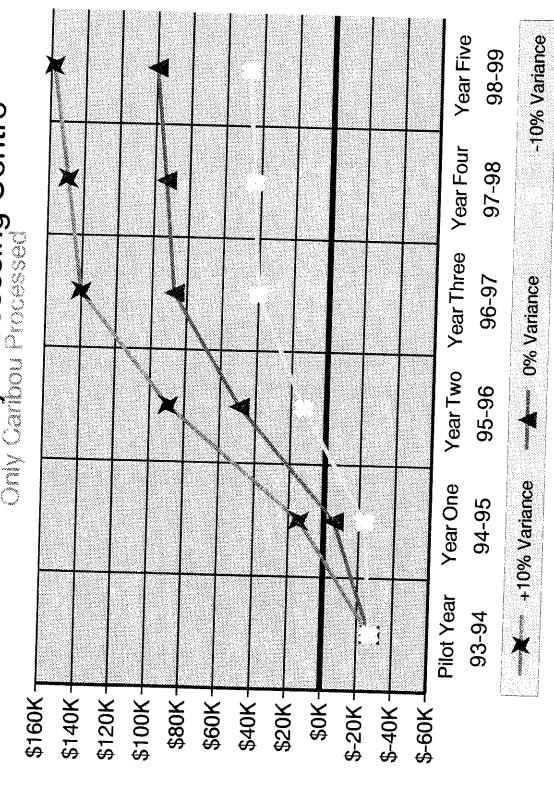
CONCLUSION

Community Processing Centres processing only caribou generate the highest level of income. This scenario is financially viable.

Summary Income Statement

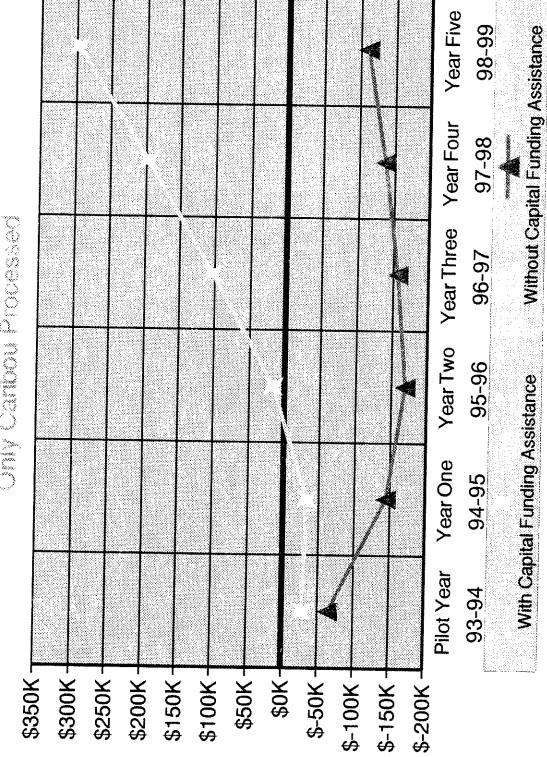
100me With Capital Finding Assistance (Before taxes)

One Community Processing Centre



0% Variance (Seiore taxes)

One Community Processing Centre



239.5 A CPC that processes both seal and caribou:

- 239.5.1 This scenario is more profitable than a facility that only processes seal and is less profitable that one that only processes caribou. This option starts generating a positive income early in its second year of operation and toward the end of its third year of operation will have paid its operating deficit.
- 239.5.2 The scenario would lose its financial viability if the sensitivity variance were to descend to about 26%. At this level the seal and caribou processing CPC would stop having a negative income during it's fifth year of operation and continue to operate at an annual break-even point.
- 239.6 Two graphs are presented on the following pages. These graphs summarize the financial analysis presented in Volume Two of the Business Plan:
 - Summary Income Statement: This chart shows the forecasted income for a CPC that processes both seal and caribou. Depicted are three income curves, showing the sensitivity analysis variances of: (i) +10%; (ii) 0%; and (iii) 10%.
 - 239.6.2 <u>Summary Cumulative Income Statement:</u> This chart shows the forecasted cumulative income for the caribou and seal processing CPC.
 - 239.6.2.1 The top curve shoves cumulative income with capital funding received from the Federal and Québec governments; and
 - 239.6.2.2 The bottom curve shows cumulative income if a sital funding assistance is not received.

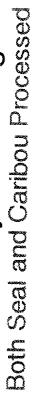
CONCLUSION

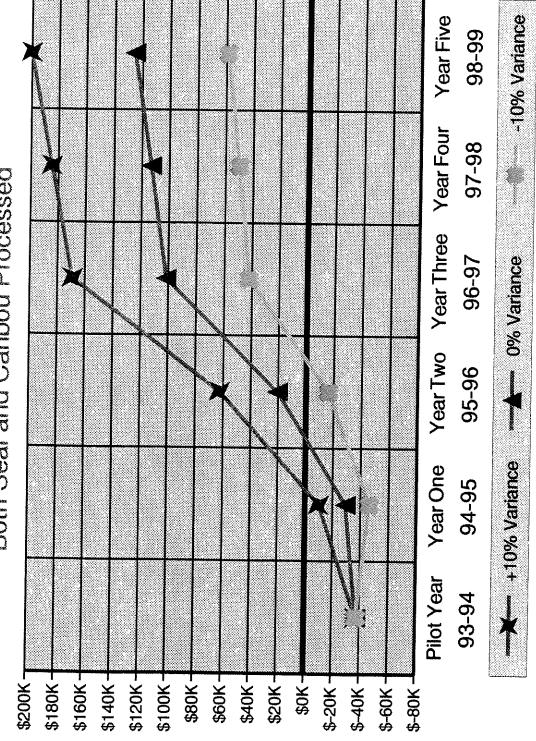
Community Processing Centres processing seal and caribou are the mid-range generators of income. This scenario is financially viable.

Summary Income Statement

Income With Capital Funding Assistance (Before taxes)

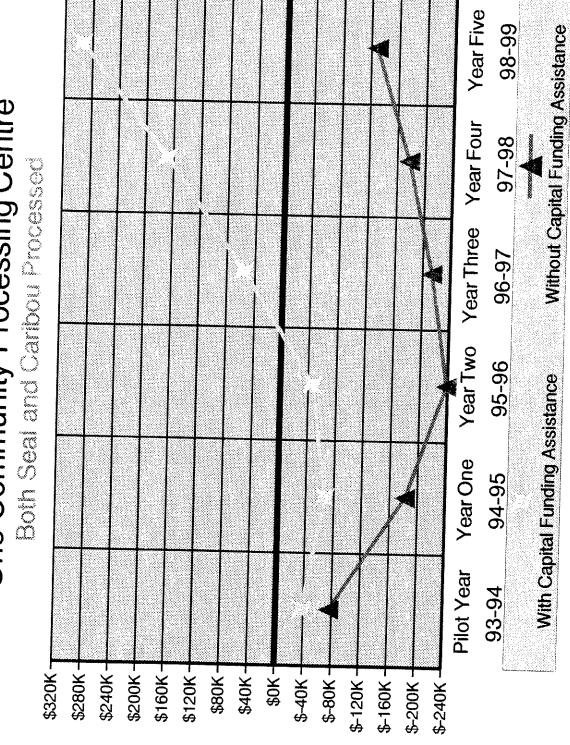
One Community Processing Centre





0% Variance (Before taxes)

One Community Processing Centre



239.7 All 14 CPCs processing seal and caribou:

- This scenario is financially viable because each of its components are in themselves financially viable. This option starts generating a positive income during the third of operation and by the end of its fourth year of operation will have paid its operating deficit.
- The scenario would lose its financial viability if the sensitivity variance were to descend to about -24%. At this level, the 14 CPCs would stop having a negative income during it's fifth year of operation and continue to operate at an annual break-even point.
- 239.8 Two graphs are presented on the following pages. These graphs summarize the financial analysis presented in Volume Two of the Business Plan:
 - 239.8.1 <u>Summary Income Statement:</u> This chart shows the forecasted income for All 14 CPCs. Depicted are three income curves, showing the sensitivity analysis variances of: (i) +10%; (ii) 0%; and (iii) 10%.
 - 239.8.2 <u>Summary Cumulative Income Statement:</u> This chart shows the forecasted cumulative income for the 14 CPCs.
 - 239.8.2.1 The top curve shoves cumulative income with capital funding received from the Federal and Québec governments; and
 - 239.8.2.2 The bottom curve shows cumulative income if capital funding assistance is not received.

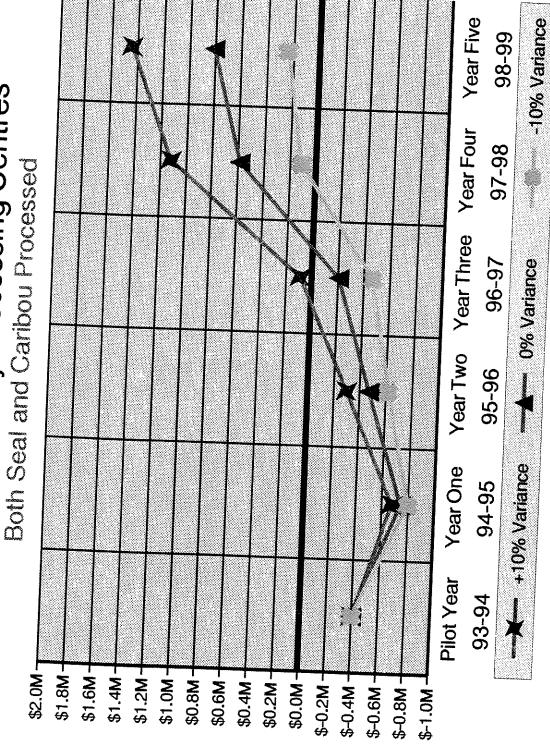
CONCLUSION

The 14 Community Processing Centres are financially viable.

Summary Income Statement

Income With Capital Funding Assistance (Before taxes)

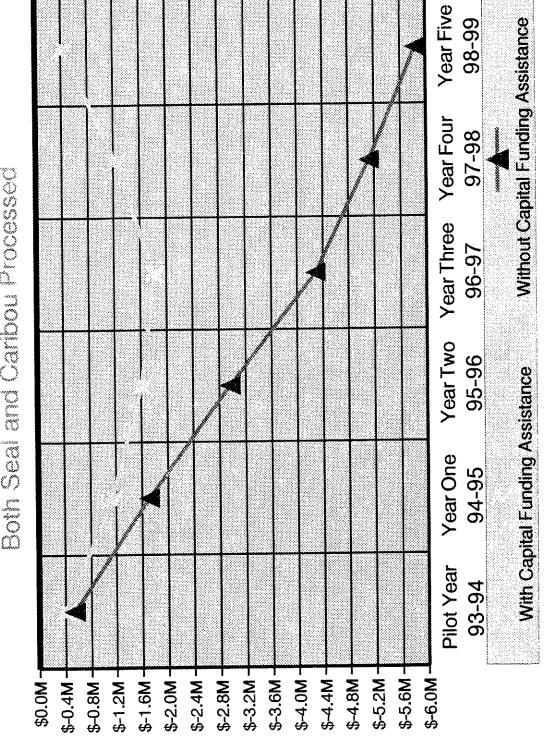
All 14 Community Processing Centres



0% Variance (Before taxes)

All 14 Community Processing Centres

Dot Sea and Caribon Possessed



Page 123 **Final Report** April 1994

239.9 The Regional Marshalling Facility:

......

239.9.1 The costing and revenue criteria that were applied to the RMF are based on the assumption that the RMF is the sole wholesale distributor of all country food and by-products outside Nunavik. The RMF's only revenue is earned from the export of country food and country food by-products and without these sales would incur and annual operation loss of \$450,000.

RECOMMENDATION

The Regional Marshalling Facility must be the sole exporter of country food and country food by-products.

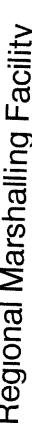
- The RMF is financially viable, and starts generating a positive income during its third year of operation and by the end of the fifth operating year will have paid its operating deficit.
- The RMF scenario would lose its financial viability if the sensitivity variance were to descend to about -32%. At this level, the RMF would stop having a negative income during its fifth year of operation and would continue to operate at an annual break-even point.
- Two graphs are presented on the following pages. These graphs summarize the financial analysis presented in Volume Two of the Business Plan:
 - 239.10.1 <u>Summary Income Statement:</u> This chart shows the forecasted income for the RMF. Depicted are three income curves, showing the sensitivity analysis variances of: (i) +10%; (ii) 0%; and (iii) 10%.
 - 239.10.2 <u>Summary Cumulative Income Statement:</u> This chart shows the forecasted cumulative income for the RMF.
 - 239.10.2.1 The top curve shoves cumulative income with capital funding received from the Federal and Québec governments; and
 - 239.10.2.2 The bottom curve shows cumulative income if capital funding assistance is not received.

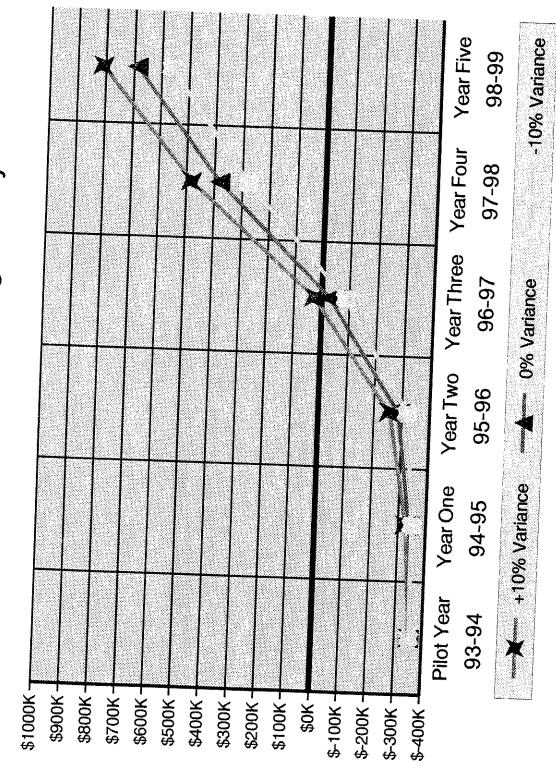
CONCLUSION

The Regional Marshalling Facility is financially viable and is an important profit generator for the Inter-Community Trade project.

Summary Income Statement

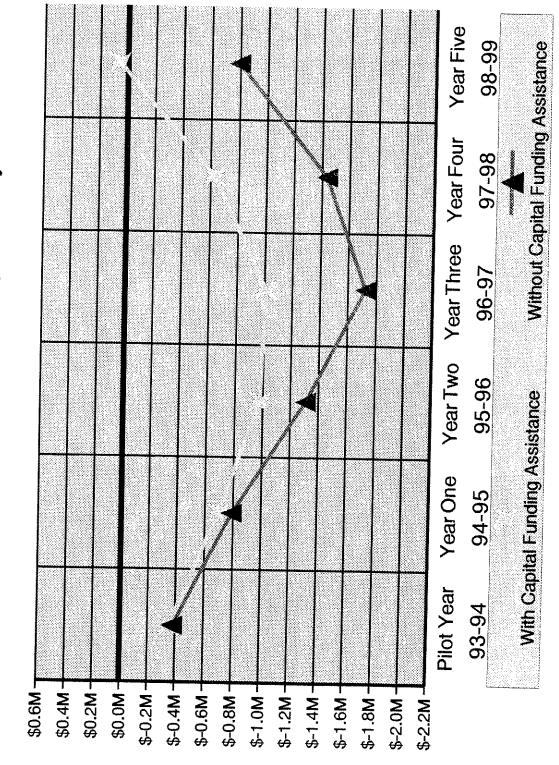
Regional Marshalling Facility





0% Variance (Before taxes)

Regional Marshalling Facility



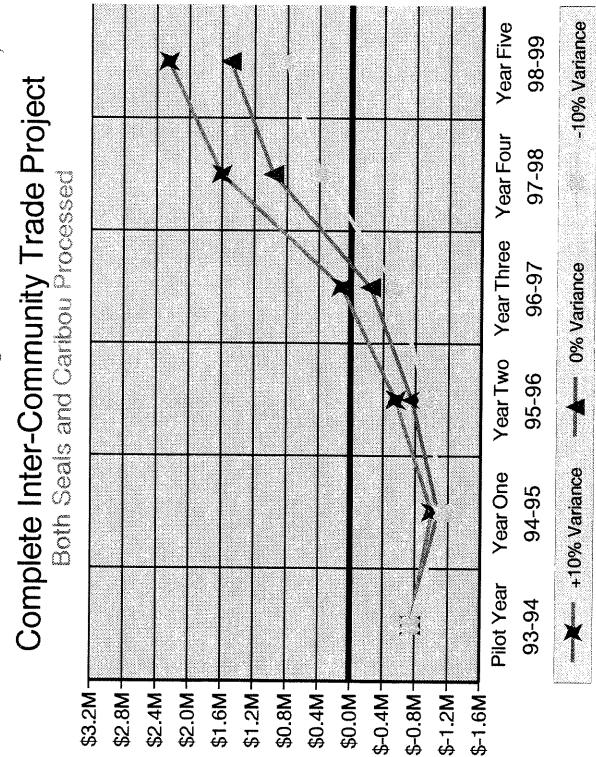
239.11 The Entire Inter-Community Project:

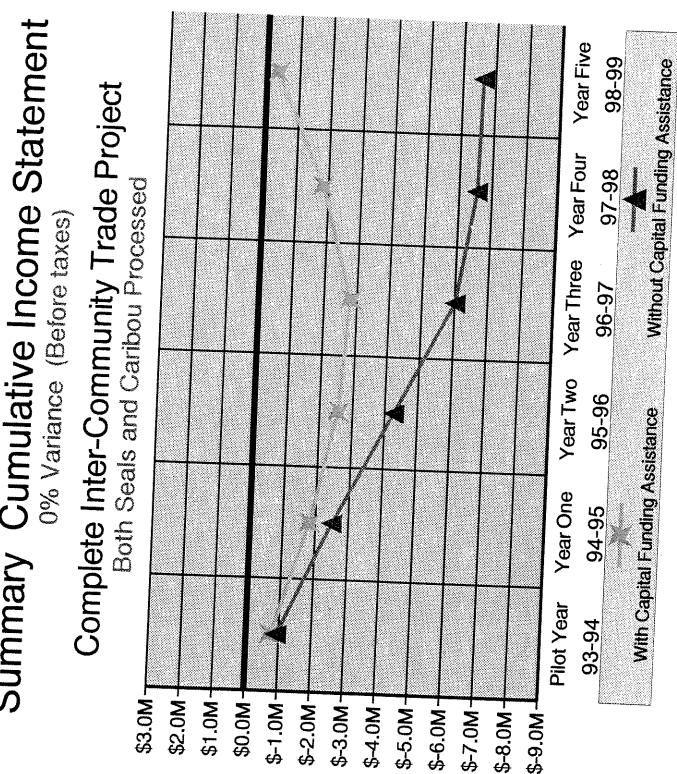
- Each of the five subordinate scenarios of the ICT project are in themselves financially viable. Since ICT is the summary of the 14 CPCs plus the RMF, it follows that the project as a whole is financially viable. The financial viability of the project is dependant upon the rate of implementation of the 14 CPCs and the rapidity with which training progresses
- The ICT project starts generating a positive income during its third year of operation and by the end of the fifth operating year will have paid its operating deficit. The project loses its financial viability if the sensitivity variance were to descend to about -28%. At this level, project stops having a negative income during its fifth year of operation and would continue to operate at an annual break-even point.
- Two graphs are presented on the following pages. These graphs summarize the financial analysis presented in Volume Two of the Business Plan:
 - 239.12.1 <u>Summary Income Statement:</u> This chart shows the forecasted income for the ICT project. Depicted are three income curves, showing the sensitivity analysis variances of: (i) +10%; (ii) 0%; and (iii) 10%.
 - 239.12.2 <u>Summary Cumulative Income Statement:</u> This chart shows the forecasted cumulative income for the ICT project.
 - 239.12.2.1 The top curve shoves cumulative income with capital funding received from the Federal and Québec governments; and
 - 239.12.2.2 The bottom curve shows cumulative income if capital funding assistance is not received.

CONCLUSION

The Inter-Community Trade project is financially viable, as are each of the Community Processing Centres and the Regional Marshalling Facility.

Summary Income Statement Income With Capital Funding Assistance (Before taxes)





PART SEVEN:

CONCLUSIONS AND RECOMMENDATIONS:

SECTION SEVENTEEN: SECTION EIGHTEEN:

CONCLUSIONS: RECOMMENDATIONS:



Figure 29: Pointing to the future.

SECTION SEVENTEEN:

CONCLUSIONS:

CONCLUSIONS:

- Once the capital costs have been satisfied the project is viable. Profits generated by the project will be sufficient to:
 - 240.1 Create a financial capital reserve to expand existing facilities, and replace capital equipment;
 - 240.2 Invest in the development of additional value-added products, produced from country food by-products; and
 - 240.3 Provide the community with much needed revenues, additional job creation and investment opportunities.
- 241 The principles benefits of the project are:
 - 241.1 Creation of 300 seasonal harvesting and processing jobs
 - 241.2 Generation of 125 to 150 jobs in secondary industries;
 - 241.3 Inspection of country foods and the subsequent health benefits;
 - 241.4 Establishment of an improved monitoring system for the conservation management of wildlife in Nunavik;
 - 241.5 Promotion of employment in areas of cultural importance; and
 - 241.6 The provision of country foods, at prices affordable to the targeted market.
- 242 The project has the support of:
 - 242.1 The Inuit population support the project as it meets all of their requirements;
 - 242.2 Makivik Corporation has placed the Inter-Community Trade project among its highest priorities;
 - 242.3 The Québec government is supportive of all quota, inspection and certification adjustments required for the project; and
 - 242.4 The Federal government is equally supportive of the project and its socio-economic benefits.

- 243 There are a few essential points which must be kept in the forefront to ensure the successful implementation and operation of the project:
 - 243.1 Quality management must be maintained at the highest level;
 - 243.2 Training must be appropriate to the Inuit population, and presented in Inuktitut;
 - 243.3 Conservation and management of the wildlife species must always be one of the two primary priorities; and
 - 243.4 The role of the RMF is central to the projects success and profitability.

CONCLUSION

The Inter-Community Trade project is financially viable, will create employment, will provide economic incentive to the Nunavik region.

Inter-Community trade is essential to the health, well being and dignity of the Inuit population and must be a top priority of the Federal and Québec governments and Makivik Corporation.

SECTION EIGHTEEN:

RECOMMENDATIONS:

RECOMMENDATIONS:

- The project consistently meets and or exceeds all of the financial, socio-economic, conservation management and individual needs of the Inuit population. It is recommended that:
 - 244.1 The project be undertaken as described within this business plan;
 - 244.2 That formal requests be made to the Federal and Québec governments for levels of funding indicated in the table presented below; and
 - 244.3 That Makivik Corporation establish a project management office that is tasked to implement the Inter-Community Trade (ICT) project.

FIVE YEAR FUNDING REQUIREMENT (MILLIONS OF DOLLARS)

	Financier	Amount	Totals
Construction of 14 Processing Centres and Regional Marshalling Facility	Makivik ISC	3.0 10.8	\$13.8
Capital Training Other Training	MAPAQ	2.8	\$ 2.8
Project Implementation	ISC Makivik	1.3 1.5	\$ 2.8
Bridge Financing and sunk inventory costs	Makivik	5.5	\$ 5.5
Total Budget :			\$24.9

RECOMMENDATION

- 1. The Inter-Community Trade Project should be implemented in its entirety.
- 2. Funding assistance must be sought from the Federal and Québec Governments.

ANNEX A:

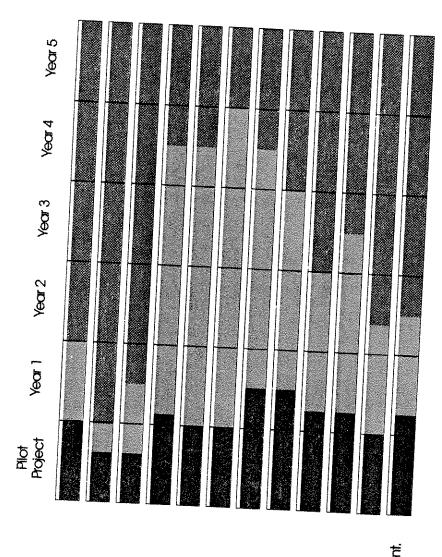
IMPLEMENTATION PLAN:

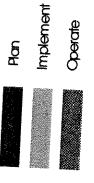
The Implementation of the Inter-Community Trade (ICT) Project is phased over five years. The 12 major steps have been identified as the following phases:

245.1	Project Design & Funding;
245.2	Quotas;
245.3	Conservation Management;
245.4	Harvesting Methods and Practices;
245.5	Processing Methods and Practices;
245.6	Inspection and Certification;
245.7	Plant and Facilities;
245.8	Training, The Ultimate Challenge;
245.9	Marketing Country Foods;
245.10	Regional Marshalling Facility;
245.11	Information Management System;and
245.12	By-Product Research and Development.

The implementation of each of the 12 phases is, for the purpose of this business plan, divided into three parts; (i) Planning; (ii) Implementation; and (iii) Operation. The project team tasked with the implementation of the Inter Community Trade project will have to a detailed implementation plan. The chart on the following page graphicly represents the implementation plan.

Implementation Plan





1 Project Design & Funding

2 Quotas

3 Conservation Management

4 Harvestling methods and Practices

5 Processing Methods and Practices

6 Inspection and Certification

7 Plant and Facilities

8 Training and Certification

9 Marketing Country Foods 10 Regional Manhalling

10 Regional Marshalling Facility

11 Information Management System 12 By-Product Research and Development,

ANNEX B:

BIBLIOGRAPHY:

A Strategy for Arctic Foods Development in the Baffin Region. Economic Development and Tourism, G.N.W.T.

Analyse du système de suivi du caribou. Par Michel Crête et René Nault. Direction de la gestion des espèces et des habitats. Ministère du Loisir, de la Chasse et de la Pêche. Québec. Octobre 1989.

Analyse Technique et Économique du Potentiel d'Exploitation des Resources Marines du Nord Québécois. Logimer Inc. Anonymous (circa 1986). Employment and Income Patterns in Northern Québec. Makivik Corporation.

An Economic Development plan for the Outlying Regions of Québec North Shore Component. Government of Canada. Regional Industrial Expansion. Consultation Paper. December 21, 1987 (reprint).

Baffin Arctic Food Development Strategy. Anonymous (1989).

Bill 83 (Chapter 47). L'Éditeur Officiel du Québec (December 1982.)

Caribou Slaughterhouse Project. Kuujjuaq Québec. Request for Assistance - Feasibility Study. Prepared by "Société nationale de Consultants Polar Inc.".

Commercialisation de la viande de Caribou du Nouveau-Québec. Étude de faisabilité. Gouvernement du Québec. Ministère du Loisir, de la Chasse et de la Pêche. Direction régionale du Nouveau-Québec. Septembre 1994. (Disponible en anglais).

Country Food Marketing Survey, Iqualuit. Mark Webber (1987).

Feasibility Study for Re-Establishment of the Seal Fishery in Northern Québec. Prepared for Seaku Fisheries Inc. Presented to Department of Fisheries and Oceans, Aquaculture Testing and Experimentation Program, Québec. Prepared by SINAAQ Entreprises Inc., April 1992.

Iceland Scallops Operational Feasibility Report. Submitted to Seamy Fisheries Limited, Lachine, Québec. Submitted by TAVEL Limited, Dartmouth, Nova Scotia. 92-017. June 1992.

ICT - Concept Proposal. Anonymous (October 1991). Economic Development Department, Makivik Corporation.

James Bay and Northern Québec Agreement and Complementary Agreements. Les Publications du Québec, 1991 Edition.

Keeping on the land. Ames, Axford et al. (April 1988)

Les Inuit du Nouveau Québec, Leur Milieu Socio-économique. Ministere de l'Industrie et du Commerce (1987).

Manipulation de hardes de caribous de la rivière George à l'automne 1985. Ministère du Loisir de la Chasse et de la Pêche. Direction de la Faune Terrestre. René Nault, Didier Le Henaff. Septembre 1986.

Marketing Caribou Meat from Nouveau-Québec. Feasibility Study. Québec. Gouvernment du Québec, Ministère du Loisir, de la Chasse et de la Pêche, Direction régionale du Nouveau-Québec. September 1984. (Available in French).

Marketing Study Relating to ICT in Nunavik. Prepared for Seaku Fisheries Inc., by David Barrett. Fisheries and Aquaculture Testing and Experimentation Program. March 1992.

National Assembly of Québec. Bill 83 (Chapter 47. An Act respecting the support program for Inuit beneficiaries of the James Bay and Northern Québec Agreement for their hunting, fishing and trapping activities. 1982. This publication is bilingual.

Native Self-Sufficiency. A Proposal to establish a gaming operation in Ontario as a Pilot Project at Kettle and Stony Point First Nation, Proposed by Huron Estates, Kettle and Stony Point First Nation. 1992.

Nunavik ICT Initiative. Freight Distribution System Feasibility Study. Fisheries and Aquaculture Testing and Experimentation Program. Prepared for Seaku Fisheries Inc. For Transmode Consultants Inc., April 1992.

Nutritional and Toxicological Components of Inuit Diets in Broughton Island, N.W.T.

Plan de gestion du caribou du Nord Québécois 1987-1992. Ministère du Loisir, de la Chasse et de la Pêche, Direction régionale du Nouveau-Québec en collaboration avec la direction de la faune terrestre. Juin 1987.

Programme Global Associé au Développement des Places du Nard Québécois. Anonymous (fév. 1989). MPO, KRG et MAPAQQ.

Projet d'abattoir pour caribou, Kuujjuaq, Québec. Préparé par Société Nationale de Consultants Polar Inc. Pour présentation au Ministère du Loisir, Chasse et Pêche, Gouvernement du Québec, Octobre 1985.

Projet expérimental de garde de caribous en captivité à Kuujjuaq, Nouveau-Québec en vue de leur commercialisation. Par Denis Vandal et Jean Huot. Ministère du Loisir, de la Chasse et de la Pêche. Direction régionale du Nouveau-Québec, Service de l'aménagement et de l'exploitation de la faune. Avril 1989.

Research to Establish Present Levels of Native Harvesting for the Inuit of Nunavik. Submitted to Coordinating Committee on Hunting, Fishing and Trapping. Established by and in Accordance with the James Bay and Norther Québec Agreement. Submitted by Native Harvesting Research Committee. October 1988.

Taqralik. Summer in the Land of Shadows. June 1985.

Technical Analysis of Inuit Involves the 55th Parallel. March 1988.	ment through Job	Opportunities in the	13 Municipalities	North of
		/		