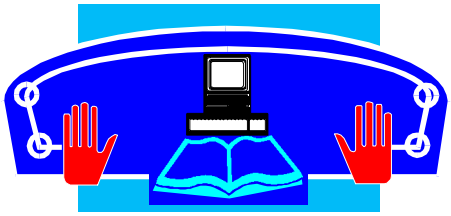

Business Plan - Country Foods Arctic Foods, Food Marketing/prod Development
Date of Report: 1987
Author: Pm. Associates
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TABLE OF CONTENTS

TABLE OF CONTENTS (cont'd)

1.0
INTRODUCTION

1.0 INTRODUCTION

Over the past couple of years, the Inuvialuit Game Council (I.G.C.) in association with the Department of Renewable Resources (N.W.T.), have undertaken several projects directed at developing a commercially viable game meat industry within the Western Arctic. The projects were designed to address certain elements related to the harvesting, processing and marketing of Musk ox and Caribou, both of which are indigenous to the area. The projects included the following:

a) A Musk ox meat inspection project to test methods and procedures of Slaughtering to conform to the requirements of Agriculture Canada. Such conformity is required to obtain "Federally Inspected Product" which is mandatory to shipment and sale outside of the Northwest Territories. Critical to this inspection process is the requirement for an ante-mortem prior to slaughter, along with the design and operation of an acceptable abattoir facility which will conform to Agriculture Canada's inspection requirements.

As slaughter was conducted in Dec ember 1985 and resulted in "Federally Inspected Product". However, there was an understanding that certain improvements would be necessary prior to subsequent approvals. The most notable of these modifications deal with sanitation aspects related to the abattoir operation.

b) A Caribou harvesting project was directed at developing an organized slaughter, once again directed at compliance with Agriculture Canada.

b) (con ' t)

Caribou, unlike Musk ox, are more difficult to herd and corral, which means they have to be killed in their environment and hauled to the abattoir operation. There is some question as to the acceptability of this with respect to Agriculture Canada, as ante-mortem examinations are not readily obtainable.

c) A third project focused on the development of processed products utilizing the carcass trimmings. These included various sausages, jerky, meat patties, etc. Some test marketing was undertaken in the N.W.T., primarily through Ulu Foods in Inuvik. The processing was done by Ulu Foods which limited distribution of the product (N.W.T. only) as this processing facility does not comply with Agriculture Canada requirements.

As a result of these test projects, there appears to be an opportunity to develop a commercial operation, conditional upon resolving some of the outstanding issues noted above.

In light of the situation, P. M. Associates Ltd. of Winnipeg, Manitoba, was retained to undertake a further analysis of the potential in addition to examining possible means of resolving problems in the harvesting and processing operations. The contents of this report are intended to provide such information.

2.0
TERMS OF REFERENCE

2.0 TERMS OF REFERENCE

The Terms of Reference provided are as follows:

Phase 1 - Market Definitions

The study output must include a definition of markets and estimates of future market potential for at least the next five years. In preparing the Market Definition, the consultant(s) must atleast identify but should not be limited toproviding the Following:

(1) Estimates of (basic) demand (domestic, national and international) by appropriate products source, location, and size.

(2) An estimation of market shares of the product mix to be offered by Inuvialuit Game Council, including methods of accessing these market shares. This must include but not be limitedto providing the following:

a) Target Markets

i) What will be the most appropriate area inwhich toinitially launch the products? What are the characteristics of that area whichwill help locate future markets?

ii) What will be the optimal sequence to approach other market areas in order to maximize sales volume and profitability?

Phase 1 (con't)

b) **Product Range**

i) In what form should the product be offered for sale?

ii) What kinds of products should be offered in each target market?

c) **Product Packaging**

i) What amount of product should be sold in each package?

ii) What type of packaging should be employed?

d) **Distribution Process**

i) What should be the optimum distribution policy for each market segment and market area?

ii) Should intermediary brokers and wholesalers be employed or sales be made directly to retailers?

e) **Advertising and Promotion Policies**

i) What type and level of advertising and promotion will be required to launch the product and attain and maintain the projected demand?

ii) What level of sales promotions and other sales support mechanisms will be required? At what cost?

Phase 1 (con't)

iii) How do the answers to (e)(i) and (c)(ii) compare with competitive products?

f) Pricing Strategy

The product pricing analysis must include quantity and quality assessment relative to individual products and compared with competitive products.

(3) Development of a critical path marketing plan that would allow full penetration in each target market identified. This plan should include the timing related to plant establishment arid training.

(4) An assessment of potential competitive forces from similar operations (domestic, national and international), including any reaction to Inuvialuit Game Council's foray into the marketplace.

(5) A monthly forecast of demand and market shares for three years with the fourth and fifth year of the forecast expressed in annual values.

(6) An analysis of demand vs. supply capability.

(7) Assessment of existing infrastructure and transportation networks for marketing and distributing the proposed product mix.

Phase 2 - Product Potential

(for game meat products, namely Muskox, Caribou, Reindeer)

Based on the market definition (product demand information), an assessment of the capabilities of the Inuvialuit Game Council to produce the product mix. The production areas to be examined are whole or quarters and retail cuts but not be limited to:

Hind	Front
Roasts (round,rump)	Rib Roast
Sirloin	Braising Ribs
Steaks - Porter house	Roasts (crossrib,chuck)(
- I-bone	Brisket
Stewing, Ground	Shank
Heart, Liver	Stewing, Ground

The analysis relevant to each production area must be of sufficient detail to provide production cost models so as to determine unit costs of production for various commercial game products. Thiswill be detailed in the implementation strategy.

Phase 3 - Legal Requirement (Legislative Framework)

The consultant must review all pertinent NWT, provincial, federal, National and International (as appropriate) legislation that apply to the commercial development of the resources and their sale. The application and regulatory processes must be detailed in the implementation strategy. These will include but not be limited to provide the following:

regulations governing harvest, production, processing, marketing, and sale of game species
pertinent health acts
food and drug acts
meat grading and certification
import and export regulations
building codes

Phase 4 - Financial Feasibility

This module of the study must determine the overall feasibility of the venture based on market demand and supply and growth potential (this should involve size options), production cost analysis and price analysis. In this respect the consultant must prepare, but should not be limited to the following outputs:

(1) Determination of the optimal capital requirement to establish an operation to provide the product mix (this should include growth potential).

(2) Based on growth potential, determination of operating requirements and costs.

(3) Based on growth potentials determination of revenue streams.

(4) Based on revenue streams and costs, determination of the financing necessary to initiate and maintain operations.

(5) Break-even analysis at various market shares.

(6) Based on market potential to provide recommendation as to optimal size of operation.

Phase 4 (con 't)

(7) Annual profit and loss, balance sheets, and integrated financial statements must be prepared for 5, 10, and 15 year intervals. A cash flow projection from start-up to break-even must also be prepared.

(8) The above concerns itself with strict financial analysis; the consultant must also review and discuss other social/ economic benefits that the project could generate, ie. secondary industries, eg. velvet, muskox hair, etc.

Phase" 5 - Operational and Overall Financial Plan

Based on the above and a recommended optimal size of operation, the consultant must develop an operational and financial plan for the Inuvialuit Game Council which will include, but not be limited to:

(1) Operational Plan

a) A recommended and specific operating business structure that will match the needs of the business and the management capabilities of the Inuvialuit Game Council.

b) A manpower plan showing general position description must be prepared for each job indicating required skill areas, knowledge and education levels.

c) An assessment of the available human resources and what training is required to bring the skills levels to those identified in (b).

Phase 5 (con't)

(2) Financial Plan

a) Preparation of an integrated three-year operating budget for the recommended optimal size of operation.

b) Develop an integrated information system that would allow management to monitor income, control expenses and business performance.

Phase 6 - Implementation Strategy

As part of the assessment report, an implementation strategy based on the market size, growth potential, legal requirement, financial feasibility, operational and overall financial plan and all relevant factors will be included. The recommended strategy should be presented in such a way that facilitates the development and full scale operation of the project.

3.0
RESOURCE CONSIDERATIONS

3.0 RESOURCE CONSIDERATIONS

The principal potential sources of commercial meat products in the N.W.T. would include Muskox, Caribou and Reindeer.

a) **MUSKOX:** Before the arrival of man, the Muskoxen ranged throughout the mainland tundra region of the N.W.T. A drastic reduction in numbers resulted from the efforts of hunting expeditions of hide traders in the 19th and 20th centuries and, as a result, the species was placed under protection in 1917. Over the past 15 years, the populations have increased and it is estimated that there are presently in excess of 50,000 animals in the N.W.T. area.

Muskox exploitation was suspended until 1969 when a limited quota system was introduced on Ellesmere Island. Since then, an increasing number of Muskoxen have been alloted each year, primarily for subsistence and/or sport hunting. A commercial quota of 2,000 animals per year has been established in the Banks Island area (1982) where the population presently exceeds 20,000 animals. It is this herd which provides the initial base for a potential commercial operation.

b) **CARIBOU:** Within tile Inuvik area, there is a major barren-ground Caribou herd (Bluenose Herd) totalling some 95,000 animals. This species is more commonly harvested for subsistence than is tile Muskox, but accurate harvest data are not readily available. A commercial quota of some 800 animals per year has been established at this time.

3.0 Resource Considerations (con't)

c) **REINDEER:** There is a privately owned herd comprising some 15,000 animals located in the N.W.T. It is likely that a sustainable harvest of some 1,500 per year could be maintained were it available For commercial use.

The resource information provides some insight into the available potential for commercial exploitation. In rough terms, the total output available From the three existing sources is as Follows:

	Carcass Weight	Saleable Product
Muskox	300,000 lbs.	200,000 lbs.
Caribou	120,000 lbs.	80,000 lbs.
Reindeer	225,13(30 lbs.	150,000 lbs.
Total	645,000 lbs.	430,000 lbs.

However, there are some limitations with respect to the above. Firstly, the Reindeer herd is privately held and For purposes of this analysis is considered as unavailable for use. Secondly, the inherent problems associated with inspection of Caribou during slaughter may well restrict the commercial sale OF its products within the N.W.T. However, given the present limited caribou quota, it may be disadvantageous to seek expanded markets without adequate supply. This will be examined further in subsequent sections OF this report.

4.0
RECENT ACTIVITIES

4.0 RECENT ACTIVITIES

a) Production

MUSKOX: As outlined, the commercial Muskox quota was established in 1981. Some harvesting was undertaken as early as 1981 but no significant effort was made until a processing and retail outlet was established in Inuvik (UluFoods) a couple of years ago. In the order of 150 animals are harvested annually, but as Federal inspection has not been available, commercial distribution has been limited to the N.W.T. The exception was the test project in 1986 which resulted in the inspection and approval of some 450 animals, the product being shipped to Vancouver For commercial sale at Expo. The harvest of Muskox generally takes place in the winter months, October to February being the most suitable period. Carcass weight and meat texture are most favorable in late fall, but tile timing of harvests is subject to a number of environmental factors.

The harvests take place near Banks Island, where the Muskoxen are herded, coral led and slaughtered in a temporary facility. The carcass quarters are then transported to Inuvik for storage and processing.

CARIBOU: The Bluenose Herd is located west of Inuvik. Unlike the Muskox, the Caribou does not tend to herd well, and as a result, the animal is generally taken by more traditional hunting methods. The slaughter is somewhat less organized and presents additional problems with respect to inspection and Federal approval. Although some inroads have been made towards resolving these issues, it

is not certain that the Federal inspection issue will be resulved given the present situation. Some 200 animals are harvcsLed annually, the commercial use largely restricted to the N.W.T.

t)) Processing

The fields slaughter results in quartered carcasses landed at Ulu Foods in Inuvik. The meat is placed in freezer storage pending final processing and/or direct shipment. Ulu Foods has been processing both "block ready" cuts as well as developing a variety of products to utilize the trim. These pruducts are vacuum packaged for both retail (Ulu Food Store) and wholesale distribution.

The present processing facility is not Federally approved, so processed product cannot be shipped beyond the N.W.T. For this reason, the meats which did receive Federal approval at slaughter were shipped direct to Vancouver prior to processing, in order that they could be utilized for commercial sale.

c) Sales

Recent sales activity for Ulu Foods is consistent with the harvest data. Exclusive of the sales to the Expo '86 project, the past year's data approximates the following:

1986 Sales (lbs.)	Ulu Foods	Wholesale	Total.
Muskox	3,000	12,000	15,000
Caribou	13,000	7,000	20,000
Total	16,000	19,000	35,000

4.(I c) con ' t

Caribou is more popular with the far northern populations as evidenced by the sales in the store at Inuvik. Most of the wholesale product is shipped to locations in the Western Arctic, the majority being sold in Yellowknife.

Marketing initiatives are very limited as Ulu Foods has had little capacity to undertake any substantive effort. More recently, contact has been made with a potential distributor in Yellowknife, and a preliminary contact with Hudson Bay has resulted in some interest from them. This alone could provide for distribution through a large retail network within the N.W.T. Virtually no efforts (with the exception of Expo '86) have been made beyond the N.W.T. largely due to a lack of resources and Federal approvals.

d) Problem Areas

Since the inception of limited commercial activities, the major concerns have centered around the following:

- Federal inspection of the Muskox and Caribou slaughters and establishing acceptable methods for the same. The situation would appear to be resolvable in the case of Muskox, however, there is some question with respect to the Caribou.

- Federal approval for a processing facility in Inuvik so that block ready meats and other processed products can be shipped outside of the N.W.T.

4.0 d) con't

- Development of an acceptable marketing approach for distribution of the products both in and out of the N.W.I.

- Assessment as to the overall feasibility and Implementation strategy for the project.

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MARKET CONSIDERATIONS

5.0 MARKET CONSIDERATIONS

5.1 Introduction

The world trade in game meat products (red meat, game birds, alligators, etc.) was estimated to be in the order of 55,000 tons in 1985. By and large, the major consumers are West Germany, France, Switzerland and Austria, where estimated consumption was in the order of 33,000 tons in 1985.

Major commercial red game meat products include venison, Reindeer, Wild Boar, Buffalo, etc., and although statistics are not readily available on all species, certain information does provide an indication of recent trends. The most organized production and marketing effort evolves around the New Zealand venison operations which have been remarkably successful in recent years.

New Zealand Exports of Venison - NZ$

	1982/83	1985/84	1984/85	1985/86
Australia	$ 481,526	$ 658,151	$ 1,092,134	$ 1,096,863
Canada	-o-	'13 ,915	132,474	182,204
U.S.A.	1,292,104	2,775,708	4,681,7'52	4,711,659
West Germany	4,937,711	3,665,707	8,798,471	8,246,778
Japan	553,779	823,321	1,061,061	1,747,088
Switzerland	402,507	765,521	1,186,968	2,322,795
Other Countries (30)*	913,109	1,019,650	2.104.622	2,706,449
Total	$8,579,756	$9,721,975	$19,0>7,484	$21,01 3,836

* Note this Includes Austria, Belgium, Bermuda, Barbados, China, Cook Island, Denmark, Fiji, France, East Germany, Great Br tain, Guam, Hong Kong, Indones a, Korea, Malaysia, Netherlands, Norfolk Island, Norway, Pacific Trust, Papua, Poland, Polynesia, Singapore, Solomon Island, Sweden, Taiwan, Thailand, Trin dad and Vanatua.

5.1 con't

New Zealand Exports of Venison (Kg)

	'1982/83	1983/84	1984/85	1985/86
Australia	89,337	93,354	107,494	116,812
Canada	-o-	1,973	13,039	19,404
U.S.A.	239,722	393,717	460,802	501,774
West Germany	915,902	519,958	865,991	878,251
Japan	102,742	116,783	104,435	186,058
Switzerland	74,676	108,584	116,827	237,784
Other Countries	169,408	144,238	207,613	298,524
Total	1,591,787	1,378,607	1,876,201	2,258,607
Price per Kg (NZ$)	$5.39	$7.05	$10.16	$9.39

New Zealand Exports of Venison (lbs)

	1982/83	1983/84	1984/85	1985/86
Australia	196,541	205,379	237,487	256,986
Canada	-o-	4,340	28,686	42,688
U.S.A.	527,388	866,177	1,013,764	1,105,903
West Germany	2,014,984	1,143,908	1,905,107	1,932,152
Japan	226,032	256,923	229,757	409,328
Switzerland	164,287	238,885	257,019	523,125
Other Countries	372,698	317,324	456,748	656,753
Total	3,501,931	3,032,936	3,870,549	&,924,935
Price per lb. (NZ$)	$2.45	$3.20	$4.92	$4.27
Price per lb. (Canadian)	$1.87	$2.44	$3.76	$3.26

New Zealand Exports
% Increase Over Previous Year in **Volume**

	1983/84	1984/85	1985/86
Australia	4.5%	15.1%	8.7%
Canada	N/A	560.1	48.0
U.S.A.	64.2	17.1	8.9
West Germany	(43.3)	66.6	1.4
Japan	13.7	(10.6)	78.2
Switzerland	45.4	7.6	103.5
Other Countries	(14.9)	43.9	43.9
Overall	(13.4%)	27.6%	27.2%

The above information clearly illustrates an increasing demand for venison, not only in terms of volumes but more importantly in the area of per unit prices and total export values. European markets are consistently the strongest, but significant inroads have been made in all areas, including Canada.

Closer to home, the market for Buffalo meat has grown considerably in the past decade. There are presently 10,000 Plains Bison on farms in Canada. The distribution of animals is estimated as follows:

Manitoba	400
Saskatchewan	600
Alberta	3,500
B.C.	500
Sub-Total	5,000
Eastern Canada	5.000
Total	10,000

5.1 con't

These totals include male and Female breeding stock, replacement males and females and immature slaughter animals. There is no data available to indicate the relative proportions of each category. In addition, accurate estimates are further complicated by two factors.

1) The time of year of the count estimate is not known.

2) Many of the ranchers are in the process of expanding their breeding herds. As a result, all heifers are being withheld from the slaughter market. In addition, the strong market demand for breeding cows ($1,700-$2,500 per animal) reduces the numbers of cows being offered for slaughter.

However, it is possible to combine known facts with some informed assumptions in order to estimate the annual. supply of Buffalo meat in Canada.

1) The normal male/female ratio in a Buffalo herd is 1 bull to 20 females.

2) Slaughter animals are sold at 3 years of age.

3) Virtually no females are beingsold for use as meat products.

It was assumed that. counts were taken in the spring, after the completion of calving. It was also assumed that slaughter animalsales were distributed equally throughout the year. A calving percentage of 95% was assumed with a 50/50 ratio of males to females.

was thus assumed to be comprised of 64% females and as per the following:

ature breeding females	30%
emale calves	14%
year old females	10%
year old females	10%
	64%

ulls	2%
ale calves	14%
year old males	10%
year old males	10%
	36%

lt, the total herd in Canada is estimated to contain ing mix of animals:

	Male	Female
ature	200	3,000
alves	1,400	1,400
year old	1,000	1,000
year old	1,000	1,000
	3,600	6,400

ual production for sale as meat could thus be some als. This is felt to be a high estimate. According Agriculture officials, the current sales may e closer to 1,000 animals per year.

Plains Bison will yield the following:

Prime Cuts	353.8 lbs
[rim	381.1
Bones	139. 3
Shank	1.2
	875.4 lbs

Total saleable product per animal is thus some 735 pounds. The total supply of meat is calculated as per the following:

	Low Estimate	Mid Range	!&211
No. of Animals Sold	8 0 0	1,000	1,400
Meat/animal	735	735	735
Total Supply (lbs)	588,000	735,000	1,029,000

Many producers market directly from the farm to restaurants and consumers. This is generally done on a local basis.

In Western Canada, Alexco Foods Ltd. of Edmonton appears to be the major organized marketer of Buffalo meat. According to the President of Alexco Foods Ltd., the company purchases 250 animals per year for resale to hotel and restaurant clients in Canada. This would represent from 17% to 31% of the current supply, and 34% to 62% of total Western Canadian supply.

Alexco Foods is marketing the prime cuts to restaurant clients, including major hotel chains such as CN Hotels, CP Hotels, Four Seasons Hotels, Western Hotels and Holiday Inns.

At the present time, 90% of Canadian sales are achieved in Eastern Canada. Trim portions are processed into sausages, hamburger, etc., and are primarly sold locally in Alberta. The average wholesale price is in the order of $4.15 per pound.

5.1 con ' t

The market demand for Buffalo is strong. This is evidenced by the following:

1) Breeding stock sale prices are 2.5 times Beef prices. Recent U.S.A. breeding stock sale prices are up by 50% over 1985 prices in the U.S.A. market. The Canadian market is showing similar increases.

2) Retail Buffalo prices are presently averaging $5.00 per pound for sides. In comparison a side of Beef would cost $2.00 per pound.

According to officials of the Alberta Department of Agriculture, (J. Bunich) producers are unable to meet the demand for meat and breeding stock. Harvey Payne, Game Ranching Specialist with the Manitoba Department of Natural Resources expressed similar sentiments in respect to the Manitoba situation.

There is little question that the market for game meats is increasing and it would appear that there is substantial room for expansion of existing as well as new products. Total consumption of red mea% in Canada (1985) was in the order of two million tons or some four billion pounds. By comparison, consumption in the United States exceeded thirty-six billion pounds. Total world consumption of all game meat products represents less than one-half of 1% of these two markets alone.

The consumption of game meats is largely limited by available supplies although the introduction of new products requires a well planned marketing effort. Exporters of New Zealand

venison have proven that demand can be created regardless of varying local customs. For example, this country's exports to the United States have grown from 175,000 pounds in 1976 to in excess of 1.1 million pounds in 1985. The success is largely due to marketing strategies and consistency of product quality. These aspects will be discussed further in a subsequent section.

Caribou, muskox and reindeer are all within the game meat family. There is little doubt as to theirmarketability but the ultimate success will depend on the approach taken. In light of the available resources, the" potential supplies will not have a significant impact on consumption of red meat products and, in fact, represent a small proportion of the current game meat trade.

5.2 Market Share

In a previous section, the annual available resources were outlined as follows:

	Carcass Weight
Muskox	300,000 lbs.
Caribou	120,000 lbs.
Reindeer	225,000 lbs.
	645,000 lbs.

There is likely further potential as the muskox quota may be somewhat conservative and the caribou allocations could be increased through accessing other herds. However, with the current status of the reindeer and the unresolved issues relating to the inspection of caribou, it is realistic to assume that current marketing efforts should focus on the existing

5.2 con 't.

available supplies OF caribou andmuskox, those being some 420,000 pounds at carcass weight. As market penetration increases, further attention can be given to increasing supply sources through addressing quotas and additional species.

The available commercial supply (420,000 lbs.)representsan insignificant proportion of red meat consumption and only 38% OF the current Canadian supply of buffalo meat. Given acceptable inspection and a well planned and phased marketing strategy, there is every likelihood that the current identified supplies can be absorbed within a five year period.

In undertaking the market analysis, the consultant has taken the basic premise that, with the exception of a small local N.W.-I. market, thereis no current market for either muskox or caribou. These Specific meats are essentially unknown to other markets and their introduction and penetration is essentially as a game meat product competing as a substitute for otherred meat products. Other than the Expo 86 experience, virtually no product testing has been undertaken so there is no specific data with respect to consumer reaction from which to assess future potential consumption. However, the products have the same essential qualities inherent in other game meats and the experience and successes achieved in other areas are appropriate in the market development of muskox and caribou.

In Canada, the introduction of buffalo meat presented a similar scenario, although in the early years of market development of buffalo, game meats in general were not as readily

5.2 con't

acceptable as they are currently. A number of factors have had a recent impact on the general success of game meat consumption:

- an increasing trend towards restaurant dining.
- a trend towards greater diversity in food tastes.
- a greater awareness of nutrition as evidenced by lower consumptions of high fat and cholesterol meats.
- an improvement in the processing methodologies to provide consumers with more acceptable products on a consistent basis.
- an increase in consumer education on the handling and preparation of game meats.
- a more ready acceptance on the part of restaurants to include game meats as menu items, largely as a result of the above factors.

Canada's largest distributor of buffalo meat is Alexco Foods Ltd. of Edmonton, Alberta. The company presently markets some 150,000 pounds per annum, approximately 25% of the known Canadian supply. The consultant approached Alexco Foods Ltd. to assess their experience and to ascertain their interest with respect to marketing caribou and muskox meats. Access to markets through an experienced source has its apparent advantages:

- a distribution network with existing knowledge of game meat products.
- an established customer base familiar with game meat products and the credibility of its supply.

5.2 con't

already means of market introduction through a developed and proven marketing program. This will increase short term penetration while minimizing costs.
a firm knowledge in product preparation, packaging, pricing and customer education. This will greatly reduce the trial and error associated with product development and presentation.

Alexco Foods Ltd. is prepared to undertake the distribution of the products and the marketing strategy outlined in this report is designed to achieve the following targets:

	Muskox Harvest (Number of Head)	Approximate Carcass Weight (lbs.)
Year 1	500	75,000
Year 2	800	120,000
Year 3	1,300	195,000
Year 4	1,800	270,000
Year 5	2,000	300,000

Given the status of the caribou and reindeer, these species have been temporarily excluded. However, some direct sales of caribou will be promoted given the present permit regulations. Should the inspection issue be resolved, efforts will be expanded to this product but given the identified resources, supply may well be a limiting factor.

With respect to reindeer, the market is presently strong. The recent U.S.S.R. nuclear crisis will likely limit traditional European sources and this represents a very real opportunity

5.2 con't

should supplies become available. Additional North American markets would result in a substantial exploitation of this available resource.

The market discussion will focus on two distinct geographical areas, the local N.W.T. market and those external to it. A further analysis of external markets will include domestic Canadian and international considerations.

5.3 Target Markets

a) Local N.W.T: The caribou and muskox products have had limited introduction (commercially) in the N.W.T. Presently, no inspections are required for either the slaughter or processing of these animals as long as the product remains for sale in the area. Some direct shipment is permitted outside the N.W.T. to end users insofar as the product is not further distributed on a commercial basis.

At this time, product is retailed directly through Ulu Foods in Inuvik where 1986 sales were in the order of 3,000 lbs. of muskox and 13,000 lbs. of caribou. An additional 12,000 lbs. of muskox and 7,000 lbs. of caribou were wholesaled, primarily to communities in the Western Artic. Average wholesale prices vary by product type but approximate $4.00 per pound on carcass weight. Retail prices are generally 20 - 25% higher.

There are approximately 3,200 people in Inuvik. Based on annual per capita red meat consumption, total annual utilization in 1985 was likely in the order of 500,000

5.3 a) con't

lbs. Given price and distribution networks, this figure is likely somewhat less, but the Ulu Foods sales represent less than 5% of consumption. Naturally, caribou and muskox consumption is greater than that evidenced by Ulu Foods as much of the harvest is taken directly for personal use. Even so, there is strong evidence that demand exists where the product is available on a retail basis and this could be expanded through additional marketing efforts in the western portion of the N.W.T.

Per capita retail purchases in Inuvik are in the order of one pound of muskox and four pounds of caribou. With adequate distribution in the Inuvik and Fort Smith regions alone, total sales could exceed 32,000 pounds of muskox and 120,000 pounds of caribou. Wholesale shipments for 1986, primarily to Yellowknife, included 12,000 pounds of muskox and some 7,000 pounds of caribou but these sales were derived with little or no marketing effort.

Ulu Foods has located a distributor in the Yellowknife area and is now initiating contacts with the Hudson Bay Company for supply of their northern store operations. The Hudson Bay Company has indicated a willingness to discuss the handling of northern foods products and these and other retail outlets could result in a larger utilization within the local area. Success will depend, to a large extent, on the consistency of product quality and supply, the economics of distribution, and, the development of consumer awareness and product knowledge.

5.3 a) con't

There is little doubt that the focus of the marketing effort for muskox, caribou and reindeer must take place outside of the N.W.T. but with additional marketing efforts, consumption in the area could conceivably attain the following levels:

Projected N.W.T. Shipments (pounds)

	Muskox	Caribou	Total
Year 1	15,000	20,000	35,000
Year 2	16,000	24,000	40,000
Year 3	17,000	28,000	45,000
Year 4	18,000	32,000	50,000
Year 5	19,000	36,000	55,000

With the external marketing effort on muskox, the excess supply of caribou should be directed at the local market pending a satisfactory arrangement vis a vis inspection requirements.

b) External Markets: Game meat is currently sold almost exclusively to the restaurant and hotel-motel segments of the public eating sector. The New Zealand venison sales in Canada and United States are directly attributed to these segments and resulted in 1985 shipments of 42,600 and 1.1 million lbs. respectively. Combined 1976 volumes total led less than 200,000 pounds which indicates strong growth potential given sufficient marketing efforts.

The restaurant and hotel-motel establishments can be further segmented by price structure:

5.3 b) con't

upscale restaurants with meal prices of $25.00 and up. These establishments represent less than 5% of the total outlets in North America but account for a high proportion of game meat sales due to the cost of' product and the increased frequency of European chefs who are more familiar with the product.

mid-upper scale outlets in the $16.00 to $25.00 range. These operations account for 5% to 8% of the total establishments and game meats are starting to take hold but preparation training is required.

mid scale outlets in the $8.50 to $16.00 range. These operations account for 40% of the restaurants but pricing is not conducive to game meat utilization.

- low scale establishments with prices under $8.50. Account For 45% to 50% of market but cannot be targeted for game meat consumption.

In Canada, the total restaurant market appears as follows:

Type	1986 Sales
Licensed Restaurants	$ 5,865,000,000
Unlicensed Restaurants	3,715,000,000
lake Outs	1,538,000,000
Caterers	938,000,000
Taverns	979,000,000
Total	$13,035,000,000
1985 Sales	$11,75 3 ,000,000
1984 Sales	$10,782,000,000

5.-3 b) con't

It is reasonable to expect that virtually all game meat sales will accrue to the licensed restaurant category where total food purchases are in the order of $1.8 billion. Of these, the higher price establishments ($16.00 plus) account for some $1.5 billion in sales and $450 billion in food purchases. The combined Canadian and United States markets are represented by outlets ($16.00 and up per meal) with gross receipts exceeding $10 billion and food purchases in the magnitude of $3 billion.

Within Canada, some 65% of the market is in Ontario and Quebec and the addition of Alberta and British Columbia represents in excess of 90% of consumption.

This is consistent with Alexco's present operations which include quality clientele such as CN Hotels, CP Hotels, Four Seasons Hotels; Western Hotels and Holiday Inns. Furthermore, almost 90?& of their buffalo product is shipped to eastern Canadian markets.

The situation is not markedly different in Europe. Alexco does ship small quantities to this and other international markets but their present demand outstrips supply arid there are other competitive sources for buffalo products. However, promoting in these other areas increases demand and assures higher prices in domestic markets.

The target markets for muskox and caribou consist of the local N.W.T. and external markets, those primarily being the provinces of Canada (largely Quebec, Ontario, Alberta

5.3 b) con't

and British Columbia), the United States and Europe. Optimally, the Canadian markets should be approached first, with local distribution at retail and restaurant levels and selective marketing to upper scale restaurants and hotel chains in the four major provincial markets. Given the potential limitations on supply of caribou and the present resource capacity of the muskox, it is anticipated that these markets will absorb a major portion of supplies. 10 this can be added selective marketing in target areas of Europe and the United States to further support demand and maintain price but limited supplies may require the allocation of product to assure customer satisfaction.

5.4 Product Range

The New Zealand and Alexco Foods experiences have taught some valuable lessons. Uniform consistency in product quality, portions and supply is mandatory to commercial success. This supports the concept of a centralized processing operation providing distribution networks with the desired output. The customer, particularity food service outlets, should and will likely want to avoid any processing operation as itislikely to result ininconsistenciesinfinal product and end user satisfaction. Furthermore, decentralization of processing on the part of producers can result in similar problems relating to product uniformity and presentation.

A cental processing facility should provide block ready meats and trim related products in accordance with customer preferences on a consistent basis. In addition, meats slaughtered

5.4 con ' t

during harvest should be dressed in a uniform fashion to assure similarity in treatment during processing. (For example, as the meat is generally frozen on arrival for processing, sufficient de-boning should be done during dressing so the carcass need not be thawed.)

With respect to processing, two options are available:

- to sub-contract this function to a single processor who can meet the quality control requirements or,

- to establish a facility in the N.W.T. to provide the same.

As there is an overriding objective to increase the local "value added" benefits, both options will be examined in a later section of this report. The cost/benefit relationships can then be assessed to determine the most appropriate course of action.

There may be one minor exception to the above, that being local shipments to retail outlets. Shipments of quarters may reduce wholesale costs and retail prices but some instruction may be required so as to minimize the adverse affects on sales should product quality not meet with consumer preference.

5.5 Product Packaging

The harvesting, processing and distribution constraints dictate that the product be sold in a frozen state. In view of the preference to a complete processed product, both the New

5.4 con't

preference to a complete processed product, both the New Zealand and Alexco operations have moved towards total vacuum packing of allblock ready and trim related products.

In terms of package contents, Alexco has provided the food serviceindustry with boxed product in a manner similar to specialized beef processors such as Bradley Foods. Depending on product, block ready cuts are packaged in 5 to 20 pound boxes with most trim products being packaged in ten pound quantities.

Naturally, some modifications will be required for retail outlets as more individual portions are needed but this is not difficult given an adequate vacuum packaging system.

5.6 Distribution Process

The most common method utilized in the distribution of game meats Internationally is to supply a market through a local importer who inturn:

- sells to distributors which mark up the product 15 to 35% for sale to restaurants.
- sells direct to restaurants.
- paysa broker 5% commission to sell the product to distributors and/or restaurants.

Given the location of the current operations the following is recommended:

5.6 con 't

a) Within the N.W.T. the following approach should be examined:

retain an exclusive wholesaler and/or broker with a broad existing supply network serving both retail and Food service sectors.

- combine the above with a direct selling capability should exclusivity not be required. This may be limited to specific geographical areas.

if a single satisfactory wholesaler/broker is not available, retain a number on the basis of their current geographical territories. This may also be combined with some direct sales.

wholesale directly to the retail and food service sectors.

- provide retail outlets.

The most effective distribution network would employ existing wholesalers with the capacity to supply independent and chain store outlets in addition to food service operations. Given the geographical situation, it is likely that more than one source will be required. The recent identification of a wholesaler in Yellowknife, along with the potential development of Hudson Bay stores, would go a long way to improving distribution channels. Some direct sales could be promoted but a direct sales force is not justified given the vast geographical area. Single or

5.6 a) con't

even limited purpose retail operations are not cost efficient and should not be explored further.

b) Outside the N.W.T. distribution should be done through a distributor such as Alexco Foods. Alexco Foods presently supplies wholesalers in Vancouver, Calgary, Ottawa, Toronto and Quebec. In addition, where exclusivity is not in question, direct sales are made to customers in these areas and other parts of Canada.

In addition, Alexco supplies distributors in Europe, United States and the Far East on request but present supplies of buffalo do not warrant extensive marketing efforts.

This approach will negate the marketing and distribution costs associated with establishing a direct sales force. In addition, it capitalizes on the experience and knowledge of a pioneer in the development of game meat markets.

5.7 Advertising and Promotion

Advertising and promotional efforts can be sub-divided into two geographical areas (local N.W.T. and other) and on the basis of start-up and on-going programs.

Within the western N.W.T. initial efforts will have to be made by the producer organization. This will include contacts with wholesalers, retail chains and major independent outlets, as well as selected hotel-motel operations in the major centres.

5.7 con ' t

The intent is to establish a distribution network and product awareness through providing knowledge and training in use of the meat products. Initial costs are estimated as follows:

Travel/Expenses	$10,000
Annual Food Show	5,000
Brochure/Price List/Posters (wholesale)	1,000
Recipes (retail/restaurant)	3,000
Samples	1,500
Shared Advertising	3,000
	$23,500

On an on-going basis further development and maintenance efforts will be required:

Travel/Expenses	$ 5,000
Annual Food Show	5,000
Brochure/Price List/Posters (wholesale)	500
Recipes (retail/restaurant)	1,000
Samples	500
Shared Advertising	3,000
	$ 15,000

With respect to the external markets, discussions with Alexco Foods provided the following:

	Initial Cost	On-Going cost
Trade Shows	$40,000	nil
Brochure/Price List/Posters	2,500	nil
Recipes	2,000	$ 1,000
Samples	1,000	1,000
Shared Advertising	5,000	5,000
Travel/Expenses	15,000	5,000
	$65,500	$12,000

5.7 con ' t

The initial trade show costs include Vancouver, Calgary, Ottawa, Toronto, Montreal (2) and two in Europe (Frankfort and Cologne). These provide the forum to present the product to wholesalers, brokers and restaurant people. Ihey develop interest and contact-s and generally result in initial orders whereby users test the product's acceptance with consumers. These are on-going annually but future costs will be absorbed by the distributor in the normal cost OF doing business.

In addition, the distributor and its wholesale network conducts scheduled follow-up with restaurant operations to provide further education in product preparation. These costs are born by the distribution network components.

It is likely that there will be a cost-shared program in the area of literature and promotional programs both with the distributor and restaurant operations. Additional travel costs are included for the producer organization to maintain liaison with the distribution network.

Alexco Foods presented both caribou and muskox cuts to the Vancouver Trade Show in March of -1987. The consultant discussed the reaction with Alexco and interest was strong. The wholesalers have demonstrated a sincere interest in handling the product in the area.

This approach to product initiation and maintenance is similar to the methods utilized by the New Zealand venison operations and AlexcoFoods introduction of buffalo meat. Given the limited volumes of product available in the N.W.T., the use

5.7 con't

of an existing distribution network provides a feasible means to achieve market penetration on a broader geographical basis.

5.8 Pricing Strategy

Prices of game meats have risen considerably over the past few years as limited supplies have not generally kept pace with market demand. New Zealand venison (f.o.b. New Zealand) increased from $1.85 Cdn. to $3.20 Cdn. (per pound) between 1983 and 1986. This is based on total carcass weight. Alexco presently offers New Zealand cuts on a wholesale basis and prices range from $3.00/lb. for chuck and shoulder cuts to $8.00 per pound for the saddle.

Buffalo meat prices are similar as illustrated in Alexco's wholesale and direct pricing structures. The direct pricing relates to shipments from Alexco to the food service industry where no wholesaler is involved. On a carcass weight, the wholesale price is approximately $4.15 per pound while direct pricing derives an average of $4.70 per pound.

Ulu Foods existing wholesale prices are in the order of $4.00 per pound on carcass weight and they retail at a 20 - 25% mark-up.

Addressing the problem of pricing requires some analysis of the carcass and its potential yield and relating this to available data on competitive products. The average muskox, caribou or reindeer would compare with buffalo as follows:

5.8 con ' t

Percent of Carcass	Buffalo	Muskox / Caribou / Reindeer
Block Ready Cuts	40 %	43%
Trimmings	44%	24%
Bones	16%	33%
Average Carcass wt/lbs.	875	150

The bone weight is considerably greater in the smaller animals but the trimmings comprise a much smaller proportion of the total carcass weight. A more detailed analysis of the buffalo provides the following:

5.8 con't

Typical Yield lest/Price Structure
Plains Buffalo (Alexco Foods)

	% Yield of Carcass	Avg. Weight Yields (lbs.)	Wholesale Price (FOB Edmonton)	1otal Revenue
Sirloin Tip (Boneless)	3.82	33.4	$7.03	$234.80
Inside Round (Split)	4.92	43.1	6.78	292.22
Outside Round (Boneless)	3.19	27.9	6.78	189.16
Eye of the Round	1.58	13.8	6.78	93.56
Strip Loin (Bonless)	2.58	22.6	13.72	310.07
Rib Eye Roll	3.30	28.9	14.17	409.50
lenderloin	1.48	12.9	20.29	261.74
Rib Bones	0.56	4.9	3.49	17.10
Sirloin Butt (Boneless)	2.92	25.6	8.16	208.90
Square Cut Chuck (Boneless)	11.98	104.9	4.06	425.89
Shoulder Roast (Boneless)	4.09	35.8	4.51	161.46
Sub-Total	40.42	353.8	$7.36	$2,504 .40
Irim	43.53	381.1	varies	$2. 70*
Bones	15.91	'139 .3	nil	nil
Shrink	0.14	1.2	nil	nil
Sub-Total	59.58	521.6	n/a	n/a
Total	100.00	875 .4	$4.15	$3,632.90

* Average

5.8 con ' t

If this yield and price structure is utilized for analysis of northern meats, the results are as follows:

Estimated Yield/Price Structure
Muskox/Caribou

	Percent	Est. Yields (pounds)	Est. Wholesale (FOB Edmonton)	Total Revenue (Wholesale)
Sirloin lip (Boneless)	9.45	6.1	$7.00	$42.70
Inside Round (Split)	12.17	7.9	6.75	53.32
Outside Round (Boneless)	7.89	5.1	6.75	34.42
Eye of the Round	3.19	2.5	6.75	16.88
Strip Loin (Boneless)	6.38	4.1	14.00	57.40
Rib Eye Roll	8.16	5.3	14.00	74.20
Tenderloin	3.66	2.4	20.00	48.00
Rib Bones	1.39	1.0	3.50	3.50
Sirloin Butt (Boneless)	7.22	4.7	8.00	37.60
Square Cut Chuck (Boneless)	29.64	19.3	4.00	77.20
Shoulder Roast (Boneless)	10.12	6.6	4.50	29.70
Sub-Total	100.00	65.0	$7.31	$474.92
Trim	100.00	35.0	2.70	94.513
Bones	100.00	50.0	0.00	0.00
Total	100.00	150.0	$3.80	$569.42

ALEXCO FOODS

BUFFALO PRICE LIST — WHOLESALE

Vacuum Packed Block Ready Cut — EFFECTIVE APRIL 1, 1986

ITEM	AVERAGE WEIGHT	SELLING PRICE			
Sirloin Tip Roast boneless	6.5 Kg.	$15.50	Kg.	$ 7.03	Lb.
Inside Round boneless, split	4.5 Kg.	$14.95	Kg.	$ 6.78	Lb.
Outside Round boneless	6.0 Kg.	$14.95	Kg.	$ 6.78	Lb.
Eye of The Round	2.0 Kg.	$14.95	Kg.	$ 6.78	Lb.
Striploin boneless	4.5 Kg.	$30.25	Kg.	$13.72	Lb.
Rib Eye Roll		$31.25	Kg.	$14.17	Lb.
Top Sirloin Butt boneless	5.0 Kg.	$18.00	Kg.	$8.16	Lb.
Full Tenderloin	3.0 Kg.	$44.75	Kg.	$20.29	Lb.
Shoulder Roast boneless	6.0 Kg.	$ 9.95	Kg.	$4.51	Lb.
Square Cut Chuck boneless	9.5 Kg.	$ 8.95	Kg.	$ 4.06	Lb.
Rib Fingers	5.0 Kg. Bx.	$ 7.70	Kg.	$ 3.49	Lb.
Buffalo Trimmings	30.0 Kg. Bx.	$ 6.60	Kg.	$ 2.99	Lb.
Buffalo Burger - 1/4 LB.	5.0 Kg. Bx.	$ 7.25	Kg.	$ 3.29	Lb.
Lean Ground Buffalo	5.0 Kg. Bx.	$ 8.75	Kg.	$ 3.97	Lb.
Buffalo Breakfast Sausage		$ 8.50	Kg.	$ 3.85	Lb.
Buffalo Smokies - 4 per pkg.	5.0 Kg.	S 6.25	Kg	$ 2.70	Lb.
Buffalo Smokies	4-5.0 Kg.	$ 5.95	Kg.	$ 2.70	Lb.
Buffalo Salami	3.5 Kg.	$ 8.95	Kg.	$ 4.06	Lb.
Pickled Buffalo Smokies - 24 Jar		$19.50			
Buffalo Jerky	150 Gm.	$14.00	Ea.		
Smoked Buffalo Ham		$24.00	Kg.	$10.88	Lb.
Dandy Gourmet Spice 24/90 gm. Jars		$26.40	Cs.		
Dandy Gourmet Spice 2.5 Kg.		$18.00	Ea.		
Side Caroass		$ 8.20	Kg.	$ 3.72	Lb.
Fronts		$ 7.85	Kg.	$ 3.56	Lb.
Hinds		$ 9.75	Kg.	$ 4.43	Lb.
Short Hip-Knuckle Bone & Sirloin Lip on		$12.00	Kg	$ 5.45	Lb.

OTHER PRODUCTS AVAILABLE UPON REQUEST
PRICES SUBJECT TO. CHANGE WITHOUT NOTICE"
ALL PRICES F.O.B. EDMONTON, ALBERTA

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18116 -107 Avenue
Edmonton, Alberta
Canada
T5S 1K5

ALEXCO
FOODS

FOODSERVICE DIRECT
BUFFALO PRICE LIST — EFFECTIVE FEB. 1, 1987
Vacuum Packed Block Ready Cut

ITEM	AVERAGE		SELLING PRICE		
Sirloin Tip Roast boneless	6.5 Kg.	$17.80	Kg.	$ 8.07	Lb.
Inside Round boneless, split	4.5 Kg.	$17.20	Kg.	$ 7.80	Lb.
Outside Round boneless	6.0 Kg.	$17.20	Kg.	$ 7.80	Lb.
Eye of the Round	2.0 Kg.	$17.20	Kg.	$ 7.80	Lb.
Striploin boneless	4.5 Kg.	$33.90	Kg.	$15*37	Lb.
Rib Eye Roll		$35.05	Kg.	$15.90	Lb.
Top Sirloin Butt boneless	5.0 Kg.	$20.10	Kg.	$ 9.12	Lb.
Full Tenderloin	3.0 Kg.	$50.50	Kg.	**$22.90**	Lb.
Shoulder Road boneless	**6.0 Kg.**	**$11.45**	Kg.	**$ 5.19**	Lb.
Square Cut Chuck boneless	**9.5 Kg.**	**$10.30**	Kg.	$ **4.67**	Lb.
Rib Fingers	**5.0 Kg.Bx.**	$ 8.85	Kg.	**$ 4.02**	Lb.
Buffalo Trimmings	30.0 Kg.Bx.	$ 7.55	Kg.	**$ 3.42**	Lb.
Buffalo Burger - 1/4 LB.		**$ 8.20**	Kg.	$ 3.72	Lb.
Lean Ground Buffalo	**5.0 Kg.Bx.**	**$ 9.90**	Kg.	$ 4.49	Lb.
Buffalo Breakfast Sausage		**$ 9.70**	Kg.	$ 4.40	Lb.
Buffalo Smokies 4 per pkg.	**5.0 Kg.Bx.**	$ 7.10	Kg.	$ 3.22	Lb.
Pickled Buffalo Smokies - 24/Jar		$22.05	Ea.		
Buffalo Jerky - 150 Gm.		$16.45	Ea.		
Smoked Buffalo Ham		$27.15	Kg.	$12.31	Lb.
Dandy Gourmet Sprice 24/90 Gm. Jars		$30.00	Cs.		
Dandy Gourmet Spice 2.5 Kg.		$19.50	Ea.		
Side Carcass		**$ 9.20**	Kg.	**$ 4.18**	Lb.
Front		**$ 8.35**	Kg.	**$ 3.79**	Lb.
Hinds		**S10.25**	Kg.	**$ 4.65**	Lb.
Short Hip-Knuckle Bone Sirloin Tip on		$11.95	Kg	**$ 5.43**	Lb.

OTHER PRODUCTS AVAILABLE UPON REQUEST
PRICES SUBJECT TO CHANGE WITHOUT NOTICE
**ALL PRICES F.O.B. EDMONTON, ALBERTA

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6.0
MARKETING PLAN

6.0 MARKETING PLAN

The development of a critical path requires certain assumptions:

a) That the project will proceed and that the muskox harvests in the winter of '1987/88 will produce federally inspected product. The plan does not predicate federal inspection of caribou at this time.

b) That a new processing facility will be constructed in Inuvik, its capacity being" sufficient to handle muskox, caribou and reindeer. Total capacity would be in the order of 7,500 animals per annum to account For future expansion. It is anticipated that the plant would be constructed during the spring and summer with testing and training completed by October in time for delivery of the first harvest efforts. lime zero will be established as the date the processing facility is ready for commercial production whether that be October 1987 or a subsequent period.

c) That marketing efforts in the N.W.T. will be carried out regardless of the timing on the new plant as product can be distributed in these areas at present.

The attached schedule provides an approximate critical path marketing plan for the first 18 months based on the above assumptions. Estimated costs are provided on a monthly basis utilizing the budgets derived in 5.7.

Preliminary Marketing Scheule
For Initial Market Penetration

	May -5	June -4	July -3	Aug -2	Sept -1	Oct 0	Nov +1	Dec +2	Jan +3	Feb +1+	March	April +5	+6	May +7	June +8	July +9	Aq +10	Sapt +11	Oct +12	Total
Construction of Plant	———	———	———	———	———															
Equipment Installation			→	→	→															
Testing and Training				———	———	———														
Commercial Production (Start)							*													
Delivery of Harvest						200	300	200												
Commercial Production (End)											*									
Ship to Edmonton								*			*									
Local Schedule																				
Attend Food Show											*									
Prepare Brochures/Price Lists/Posters			→	→	→															
Recipes			→	→	→	on-going														
Set Up Distribution/Sales Contacts	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
Shared Advertising	As Needed																			
Cost Estimates (dollars)	1000	2000	2500	4000	1000	500	nil	1500	nil	5000	1500	nil		500	I	500	nil	500	1500	500	$23,500
External Schedule																				
Trade %34s					•	-				-	-	-		*				•	•	
Prepare Brochures/Prices/Posters			→	→	→															
Recipes			→	→	→															
Distributor Arrangements	→	→	→																	
Shared Advertising										→	→	On-Going As Needed								
Cast Estimate (dollars)	1000	2000	1000	3500	6000	6000	500	'X.13	500	6500	6500	6500		6500	500	500	500	8500	8500	$65,500
TOTAL COST ESTIMATE	2000	4000	3500	7500	7000	6500	500	2000	500	I	1 500	8000		6500	7000	2000	500	500	10000	9000	$89,000

7.0
COMPETITIVE FORCES

7.0 COMPETITIVE FORCES

As outlined previously, game meats compete with other red meat products, primarily in the upper-scale restaurant and hotel-motel market segments. The muskox, caribou and reindeer species are a part of this game meat supply although there are some unique advantages:

a) Muskox is generally not available in most markets and provides an opportunity to introduce a unique product.

b) Caribou is a form of venison which has made few inroads, particularity in Canada. Although there are additional supplies in the East, the available N.W.T. resource is not sufficient to result in supply problems.

c) Reindeer are in high demand in Europe and with the contamination problems affecting those herds, there is likely a significant opportunity for available stocks.

The game meat market is growing rapidly and available supplies are not sufficient to meet demands. Distributors do not fear additional product lines but are more prone to Feel they serve as complementary products which will further support the general acceptance of game meat products.

8.0
DEMAND FORECAST

8.0 DEMAND FORECAST

A 36 month demand Forecast is provided in the attached tables plus a five year summary of total expected sales. It is consistent with the marketing plan and expected initiation of a new processing facility.

Caribou sales are restricted to the N.W.T. with the exception of minor external shipments as per permit regulations.

In discussions with Alexco Foods, these demands are not inconsistent with their projected sales. With an adequate marketing plan and consistency in product supply, the company's initial estimates were in the order of 100,000 in the first year.

Estimated Demand Forecast (Pounds)

	Month -5	Month -4	Month -3	Month -2	Month -1	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Muskox Demand:												
Local	[illegible]	[illegible]	[illegible]	250	1250	[illegible]	1250	1250	1250	1250	1250	1250
Canada	[illegible]	[illegible]	[illegible]	100	100	[illegible]	250[illegible]	250[illegible]	2500	250[illegible]	250[illegible]	250[illegible]
International	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0
Total	250	1[illegible]50	[illegible]50	350	350	1400	3750	3750	750	3750	3750	3750
Caribou Demand:												
Local	1700	1700	1700	7[illegible]	1700	70[illegible]	[illegible]70[illegible]	7[illegible]	7[illegible]	1700	[illegible]70[illegible]	7[illegible]
Canada	0	0	0	1[illegible]	100	1[illegible]	1[illegible]	2[illegible]	2[illegible]	250	25[illegible]	3[illegible]
International	0	0	0	[illegible]	0	[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]
Total	1700	1700	1700	[illegible]00	1800	8[illegible]	[illegible]50	9[illegible]	900	1950	950	2[illegible]
Total Carcass Wt.	2950	2950	2950	3150	3150	3250	5600	5650	5650	5700	5700	5750

Total Muskox Pounds	30,350
Total Caribou Pounds	22,100
Total Pounds	52,450
Number of Head	350

Estimated Demand Forecast (Pounds)

	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18
Muskox Demand:												
Local	350	1350	1350	1350	1350	1350	350	350	1350	1350	1350	1350
Canada	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500
International	1000	1500	2000	2500	1900	3000	3000	3500	3500	4000	4000	4500
Total	6350	7350	8150	9350	10250	10850	13350	2350	2850	3850	4350	15350
Caribou Demand:												
Local	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Canada	300	300	400	400	400	400	400	500	500	500	500	500
International	0	0	0	0	0	0	0	0	0	0	0	0
Total	2300	2300	2400	2400	2400	2400	2400	2500	2500	2500	2500	2500
Total Carcass Wt.	8650	9650	10750	11750	12650	13250	13750	14850	15350	16350	16850	17850

Total Muskox Pounds	132,500
Total Caribou Pounds	29,400
Total Pounds	161,900
Number of Head	1,078

Estimated Demand Forecast (Pounds)

	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30
Muskox Demand:												
Local	1400	1400	1400	4[illegible]	1400	4[illegible]	400	400	40[illegible]	1400	4[illegible]	400
Canada	10000	10300	106[illegible]	11[illegible]	13[illegible]	116[illegible]	120[illegible]	12300	12600	13000	33[illegible]	13600
International	4500	4700	49[illegible]	51[illegible]	53[illegible]	55[illegible]	57[illegible]	5900	6[illegible]	6300	65[illegible]	6700
otal	15900	16400	169[illegible]	17[illegible]	180[illegible]	185[illegible]	19[illegible]	19600	2[illegible]	20700	212[illegible]	21700
Caribou Demand:												
Local	2400	2400	2400	24[illegible]	2400	2400	2400	2400	24[illegible]	24[illegible]	2400	2400
Canada	500	500	500	5[illegible]	500	600	600	600	6[illegible]	6[illegible]	600	600
International	0	0	0	0	0	0	0	0	0	0	0	0
Total	2900	2900	2900	2900	2900	3000	3000	3000	3000	3000	3000	3000
otal Carcass Wt.	18800	19300	9800	20400	20900	21500	22100	22600	23100	23700	24200	24700

Total Muskox Pounds	225,60[illegible]
Total Caribou Pounds	35,50[illegible]
Total Pounds	261,10[illegible]
Number of Head	1,74[illegible]

Estimated Demand Forecast (Pounds)

	Year 1	Year 2	Year 3	Year 4	Year 5
Musko× Demand:					
Local	15,°00	16.2[illegible]	16,8[illegible]	18.[illegible]	19.[illegible]
Canada	15,350	81·0[illegible]	141,6[illegible]	70 [illegible]	185 [illegible]
International	0	35 4[illegible]	6·,2[illegible]	82·[illegible]	96·[illegible]
otal	30,350	·2·6[illegible]	225,6[illegible]	·0.[illegible]	300.[illegible]
Caribou Demand:					
Local	20 400	24,0[illegible]	28,800	32.0[illegible]	36,[illegible]
Canada	700	5,1[illegible]	6,700	7.5[illegible]	8,[illegible]
International	0	[illegible]	0	0	[illegible]
Total	22 100	29,·[illegible]	35,500	·9.500	44,[illegible]
ota. Sales	52,450	61,700	261,100	09 [illegible]	344,[illegible]
Number of Hea-	350	1,078	1,740	2.06[illegible]	2,30[illegible]

9.0
INFRASTRUCTURE CONSIDERATIONS

9.0 INFRASTRUCTURE CONSIDERATIONS

The requirements For infrastructure and transportation warrant the following points:

a) transportation and other requirements necessary to the harvest and abattoir operations can be provided. There are some concerns with respect to the supply OF heated water for preparation of the carcass and these will be examined later in the report.

b) Freezer storage is required in Inuvik to warehouse both carcasses and finished product (if processed in Inuvik). Existing capacity is in the order of 100,000 pounds in three separate storage areas. Some renovations may be required to bring the facilities up to federal standards.

c) Processing in the existing Ulu Foods facility does not meet with federal standards. Although it is likely that this could be rectified, the facility will not meet the increased volumes anticipated in future years.

d) Alternative processing options are available:

- build a new plant in Inuvik
  ship carcass to Edmonton for processing

In order to increae the value added in the north, the preferrable option would be to locate a plant at Inuvik. However, it is recommended that finished product be sent to Edmonton for further storage and shipment.

9.0 con't

e) Transportation to Edmonton is available by air or truck. Air costs are excessive (45$/lb.) but trucking costs are reasonable at approximately 15¢ per pound.

10.0
PRODUCT MIX

10.0 PRODUCT MIX

An adequate processing facility can readily produce block ready vacuum packed products and Ulu Foods presently has limited capacity to do so. Based upon the estimated yield tests, about 44% of the carcass is comprised of bone-free block ready product. In practise, a larger proportion of the weight is shipped in block ready form as some bone remains with certain cuts.

Alexco 'Foods can provide the necessary training to produce consistent quality cuts which conform to the requirements of the food service sector.

The difficulty is not with block ready cuts but more so in the marketing of carcass trimmings. Alexco has had success with lean ground meat and pre-formed burger patties. Through processing, other trim products include sausage, smokies, salami, jerky and smoked buffalo ham. Even with the higher trim yield from the buffalo carcass, the processed product has been sold with no excess supply problems. This is due to the larger markets served although the majority of these product types are sold within Alberta.

Ulu Foods has developed a number of trim related products which have found reasonable market success. These include sausage, jerky, ground meat, hot rods, pre-formed patties, balogna, etc. With a larger market area, these products can be sold on a specialty basis.

11.0
LEGISLATIVE CONSIDERATIONS

11.0 LEGISLATIVE CONSIDERATIONS

The following provides an outline of the regulatory considerations respecting the sale of muskox and caribou products:

Primary Market (92.4% of licensed restaurant trade sales)

Sale of	Muskox	Caribou
Ontario (2)	yes	yes
Quebec (3)	yes	yes
British Columbia (4)	yes	yes
Alberta (5)	yes	yes

Notes:

1) Meat from another jurisdiction coming into any province for sale would have to be federally inspected. .

2) A license under the Game and Fish Act (Chap. 182 s.34,51) may be required. There is no present restriction on the import of meat killed legally within another jurisdiction.

3) Sale of game meat harvested within Quebec is prohibited (1984 Wildlife Conservation Act). Sale of muskox and caribou meat from out of province would be allowed.

4) A permit is required (Wildlife Act Permit Regs. S.I(d) 337/82). However, game meat is being sold at present (muskox was sold at Expo).

11.0 con't

5) A permit is required for the sale of meat from game species (Wildlife Act (1984) Chap. W-9.1 x 61.(1)). Legislative changes are being considered which would allow sale of game meat. Muskox could be sold at present but caribou might require a permit.

Secondary Market (7.6% of licensed restaurant trade sales)

Sale of	Muskox	Caribou
Saskatchewan (1)	yes	yes
Manitoba ('2)	yes	no
P.E.I. (3)	yes	yes
Nova Scotia (4)	yes	yes
Newfoundland (5)	yes	yes
New Brunswick (6)	no	no
N. W.T. (7)	yes	yes
Yukon (8)	no	no

All sales subject to Federal Inspection Requirements.

Notes:

1) Meat sales from game species is prohibited by 1984 Wildlife Act (W13.1 S.41). However, the Minister can issue a license. Muskox is not a game animal in Saskatchewan. A license would be required for the sale of caribou. This would likely be provided.

11.0 con't

2) Manitoba does not permit the sale of meat from Wildlife Act species (caribou) regardless of source. The sale of muskox meat is permitted.

3) The sale of meat from game animals is allowed under permit. There are no native large ungulates in P.E.I.

4) There are restrictions on the sale of meat from game species, but it is allowed (Lands and Forest Act (1966) Chap. 163-General Regs. 146).

5) Newfoundland has restrictions but they do license restaurants to sell big game meat (Wildlife Act, Wildlife Regs. S 39 17/84 and S 38 17/84).

6) Sale of big game meat is prohibited (Fish and Wildlife Act F14.1s.51 (1)).

7) Northwest Territories - the practise is legal.

8) Wildlife Act S.82.2 prohibits the sale of big game meat.

12.0
PRODU(H1ON CONSIDERATIONS

12.0 PRODUCTION CONSIDERATIONS

This section will deal with the production (harvest and processing) aspects related to the proposed project. In light of the demand forecasts, the following supply requirements are projected: (number of head required)

	Muskox	Caribou
Year 1	500	200
Year 2	800	200
Year 3	1,300	200
Year 4	1,800	250
Year 5	2,000	300

As previously noted, the forecasts are based upon the following assumptions:

a) That caribou will not be provided with federal inspection thus the majority of the product will remain within the N.W.T.

b) That muskox will receive federal inspection during the harvest and will therefore be available to the export market.

c) That a federally approved processing facility will be constructed in Inuvik.

d) That the reindeer herd is unavailable at this time.

Naturally, alterations to these assumptions could well provide increased demand for caribou and reindeer and processing

12.1 [illegible]

[illegible] have been accounted for in the event of this [illegible].

12.[illegible] [illegible] Slaughter

[illegible]ent harvest oper at lot] utilizes a portable abattoir [illegible] be located near the herd and relocated as required [illegible]ize collection of the animals. Once the animals are [illegible] in a temporary corral, they are killed, removed from [illegible], deheaded and bled prior to entering the abattoir. [illegible] side the tent, the legs are skinned out, the animal in [illegible]up and the hide is removed. The carcass is then [illegible] split and left hanging to cool after which time its [illegible] and taken outside to freeze. When ready, quarters [illegible]ed and shipped to Inuvik. Inspectors oversee the [illegible], examining live animals, the kill and other aspects [illegible] operation consistent with federal inspection requlre-[illegible],

[illegible]ent Operations were assessed by Agriculture Canada [illegible]ific problems were itemized (see Appendix "A"). The [illegible]ings are largely related to sanitation procedures [illegible] will require some attention in future harvests.

12.2 [illegible] Slaughter

[illegible] the caribou slaughter has not resulted in federally [illegible]ed meat. The difficulty arises in the killing itself [illegible]ls are harvested in a more traditional manner; thus [illegible] ante-mortem examinations impossible.

12.4 con't

a) The capital investment in the muskox harvesting operation will include upgrading the water supply, additional lighting and other items.

b) The investment in caribou harvest operations includes research to determine acceptble methods to obtain inspected product.

c) The processing facility includes a new building (3,000 sq.ft. at $100/ft.), plus additional equipment and finishings in the amount of $200,000.

13.0
FINANCIAL PLAN

13.0 FINANCIAL PLAN

The following provides a detailed analysis of the projected Financial implications related to the proposed project. The sales and harvest activity are in accordance with the information provided in earlier sections but will be summarized here for reader continuity.

13.1 Harvest Projections

	Number of Head Muskox	Caribou	Total Carcass Wt.
Year 1	500	200	105,000 lbs.
Year 2	800	200	150,000 lbs.
Year 3	1,300	200	225,000 lbs.
Year 4	1,800	250	307,500 lbs.
Year 5	2,000	300	345,000 lbs.

13.2 Sales Projections (lbs. at carcass wt.)

	Muskox		Caribou		
	Local	Export	Local	Export	Total
Year 1	15,000	15,350	20,400	1,700	52,450
Year 2	16,200	116,400	24,000	5,100	161,700
Year 3	16,800	208,800	28,800	6,700	261,100
Year 4	18,000	252,000	32,000	7,500	309,500
Year 5	19,000	281,000	36,000	8,000	344,000

13.3 **Price Structure (carcass** wt.)

Per Pound Prices

	Muskox		Caribou	
	Local	Export	Local	Export
Distributor Price	$3.80	$3.80	$3.80	$3.80
Distributor Margin	0.00	0.63	0.00	0.63
Operating Profit	3.80	3.17	3.80	3.17
Less: Storage (Edm.)	0.00	0.10	0.00	0.00
Transportation (Edm.)	0.00	0.15	0.00	0.60
10 Production	3.80	2.92	3.80	2.57
Processing	0.45	0.45	0.45	0.45
Storage Inuvik:				
Carcass	0.05	0.05	0.05	0.05
Finished	0.20	0.02	0.20	0.20
Net to Harvest, Overhead, Profit	$3.10	$2.40	$3.10	$1.87

With respect to the price structure, the following notes apply:

a) The distributor price of $3.80 is based upon the carcass weight as outlined in a previous section.

b) The distributor margin on export items represents a mark-up of 20% over the operating price of $3.17 per pound.

13.3 con ' t

c) Stor aye of the muskox in Edmonton is based uponacost of 1.7¢ per pound per month For an average holding period OF six months.

d) transportation to Edmonton is based upon local shippers charges of 15¢ per pound based upon full trailer loads.

e) Processing costs in Edmonton are approximately 30¢ per pound including packaging. An allowance of 45¢ per pound has been allocated to the Inuvik operation.

f) Storage charges in Inuvik have been set at 3¢ per pound per month with appropriate gross costs based upon varying periods of storage.

13.4 **Projected Production and Inventory**

The attached table outlines the production and inventory positions by location.

13.5 Projected Income and Expense for Marketing Operations

a) Sales are based upon appropriate projections and a $3.80 per pound price based upon carcass weight.

b) Distributor margins are calculated at 63¢ per pound on export product.

c) Storage, processing and transportation charges are computed as per the pricing structure and sales volumes for each local and export group.

13.5 con't

d) Producer costs are computed at $2.50 per pound on quantities sold.

e) Marketing costs are per the items identified in the marketing plan.

f) Administrative costs are charged to offset costs incurred by the processing facility and the Inuvialiat Game Council.

g) Other income includes the sale of hides at $75.00 per unit. Sales of hides are in accordance with production of muskox and are not related to meat sales.

h) Interest charges are associated with credit lines and are computedat 12% per annum.

13.6 Cash Flow for Marketing Operation

a) Sources of funds include meat and hide sales.

b) Producer costs account for total annual harvest at $2.50 per pound.

c) Processing costs account for processing of total harvest in each year.

d) Transportation to Edmonton covers costs to ship all export product for storage in Edmonton.

13.6 con ' t

e) Storage in Inuvik accounts for all requirements necessary to warehouse carcasses and finished product as per production schedule.

f) Marketing and administration costs are as per income and expense statements.

g) Cash flow shortfalls are covered by operating credit lines at 12% per annum. The average balance in Year 1 is assumed to be $125,000.

13.7 **Projected Income and Expense for Processing Operations**

a) Revenues include processing and storage fees as per cash flows for the marketing operation.

b) Expenses include costs for a manager plus staff processing costs at 25¢ per pound. This equates to some 32 pounds per hour per staff member or one carcass every five staff hours. This is considerably below industry averages.

c) Benefits are at 10% of wages.

d) Utilities include power and heat for the processing plant and freezer units.

e) Shop supplies include packaging and other required inputs.

13.7 con't

f) Administration fees are paid from charges to the marketing operations ($40,000). The balance accrues to the Game Council for its administrative and promotional efforts. This revenue will offset the travel and managers costs which are largely related to organizing the marketing program.

g) Producer charges are based upon z\@ per pound at carcass weight. These fees are paid to cover the capital inputs provided by the processing facility to the slaughter operations.

h) Depreciation is on a straight line basis to amortize building and equipment items.

i) Interest is for a term loan ($300,000) to cover equipment purchases.

13.8 **Cash Flow for Processing Operation**

a) Sources of funds include processing, storage, administration and producer fees plus contributions and loans fOr equipment and building items.

b) Uses of funds include processing operations, interest, principal pay downs, and, acquisition of slaughter and processing facilities.

13.9 Balance Sheets

Balance sheets are provided for the marketing and processing operations.

13.10 Producer Operations

As noted, producers harvesting game have been allocated for the following:

	Per Pound
Carcass	$2.50
Less:	
Processing Fees	.25
Administration Fees	.10
Net	$2.15

The processing charges are paid for lease of capital items used in the slaughter operation. The administration fees are paid to the Game Council for its overall participation and assistance in organizing the hunts. The total allocations are as follows:

	Producer Operations	Administration Fees	Processing Charges
Year 1	$225,750	$10,500	$26,250
Year 2	322,500	15,000	37,500
Year 3	483,750	22,500	56,250
Year 4	661,125	30,750	76,875
Year 5	741,750	34,500	86,250

Projected Production and Inventory
(Pounds in thousands)

	Year 1	Year 2	Year 3	Year 4	Year 5
Starting Inventory:					
Muskox	0.0	44.7	32.1	1.5	1.5
Caribou	0.0	7.9	8.8	3.3	1.3
Total	0.0	52.6	40.9	4.8	2.8
Production:					
Muskox	75.0	120.0	195.0	270.0	300.0
Caribou	30.0	30.0	30.0	37.5	45.0
Total	105.0	150.0	225.0	307.5	345.0
Total Available:					
Muskox	75.0	164.7	227.1	271.5	301.5
Caribou	30.0	37.9	38.8	40.8	46.3
Total	105.0	202.6	265.9	312.3	347.8
Ending Inventory:					
Muskox - Edmonton	44.7	32.1	1.5	1.5	1.5
- Inuvik	0.0	0.0	0.0	0.0	0.0
Caribou - Inuvik	7.9	8.8	3.1	1.3	2.3
Total	52.6	40.9	4.8	2.8	3.8

Breakeven 200,000 to 250,000 lbs

Projected Income and Expense
Marketing Operation (000's

	Year 1	Year 2	Year 3	Year 4	Year 5
SALES:					
Muskox - Local	$ 57.0	$ 61.6	$ 63.8	$ 68.4	$ 72.2
External	58.3	442.3	793.4	957.6	1,067.8
Caribou - Local	77.5	91.2	109.4	121.6	136.8
External	6.5	19.4	25.5	28.5	30.4
Total Sales	199.3	614.5	992.1	1,176.1	1,307.2
Less: Distributor Margin	10.7	76.5	135.8	163.5	182.1
NET SALES	188.6	538.0	856.3	1,012.6	1,125.1
COST OF GOODS SOLD:					
Storage (Edmonton)	1.5	15.6	20.9	25.2	28.1
Storage (Inuvik)	10.4	17.5	27.7	32.0	35.4
Processing	23.6	72.8	117.5	139.3	154.8
Transportation (Edmonton)	3.3	20.5	35.3	42.3	47.0
Producer Cost	131.1	404.3	652.8	773.8	860.0
	169.9	528.7	854.2	1,012.6	1,125.3
GROSS MARGIN	18.7	9.3	2.1	0.0	(0.2)
Less: Expenses					
Marketing Costs	59.5	43.0	27.0	27.0	27.0
Administration Costs	40.0	40.0	40.0	40.0	40.0
OPERATING PROFIT	(80.8)	(73.7)	(64.9)	(67.0)	(67.2)
Other Income (hides)	37.5	60.0	97.5	135.0	150.0
NET OPERATING INCOME	(43.3)	(13.7)	32.6	68.0	82.8
Interest	5.0	30.0	30.0	15.6	8.4
NET PROFIT	(58.3)	(43.7)	2.6	52.4	74.4

Projected Cash Flow
Marketing Operation (000's

	Year 1	Year 2	Year 3	Year 4	Year 5
INFLOWS:					
Meat Sales (net	$188.6	$538.0	$856.3	$1,012.6	$1,125.1
Hide Sales	37.5	60.0	97.5	135.0	150.0
TOTAL INFLOWS	226.1	598.0	953.8	1,147.6	1,275.1
CASH OUTFLOWS:					
Producer Cost	262.5	375.0	562.5	768.8	862.5
Processing	47.3	67.5	101.3	138.4	155.3
Transportation Edmonton	10.0	18.6	30.8	45.0	47.0
Storage (Edmonton)	6.0	10.4	17.8	25.2	28.1
Storage (Inuvik)	15.5	18.8	24.2	31.5	35.7
Marketing Costs	59.5	43.0	27.0	27.0	27.0
Administration Costs	40.0	40.0	40.0	40.0	40.0
TOTAL OUTFLOWS	440.8	573.3	803.6	,075.9	1,195.6
NET INFLOW (operations)	(214.7)	24.7	150.2	71.7	79.5
Add: Loan working capital	250.0	0.0	(120.0)	(60.0)	(70.0)
Net Cash Flow Before Financial Charges	35.3	24.7	30.2	11.7	9.5
Financial Charges	15.0	30.0	30.0	15.6	8.4
NET CASH FLOW	20.3	(5.3)	0.2	(3.9)	1.1
Cumulative	$20.3	$15.0	# 5.7	$1 .3	$12.4

Projected Income and Expense
Processing Operations (000's)

	Year 1	Year 2	Year 3	Year 4	Year 5
Processing Fees	$ 47.3	$ 67.5	$ 01.3	$138.4	$155.3
Storage Fees	15.5	18.8	24.2	31.5	35.7
	62.8	86.3	25.5	69.9	9 .0
Manager	40.0	40.0	40.0	40.0	40.0
Staff	26.3	37.5	56.3	76.9	86.3
Benefits	6.6	7.8	9.6	11.7	12.6
Utilities	40.0	40.0	40.0	40.0	40.0
Telephone	2.4	2.4	2.4	2.4	2.4
Insurance	7.5	7.5	7.5	7.5	7.5
Repairs/Maintenance	3.1	4.3	6.3	8.5	9.6
Shop Supplies	6.3	8.6	12.6	17.0	19.1
Office Supplies	1.2	1.2	1.2	1.2	1.2
Taxes	5.0	5.0	5.0	5.0	5.0
Postage	1.2	1.2	1.2	1.2	1.2
Accounting	5.0	5.0	5.0	5.0	5.0
Miscellaneous	2.0	2.0	2.0	2.0	2.0
	146.6	162.5	189.1	218.4	231.9
Operating Income	(83.8)	(76.2)	(63.6)	(48.5)	(40.9)
Other Income:					
Administration Fees	30.0	30.0	30.0	30.0	30.0
Producer Charges	26.3	37.5	56.3	76.9	86.3
Net Operating Income	(27.5)	(8.7)	2 .7	58.4	75.4
Depreciation	27.5	27.5	27.5	27.5	2 .5
Interest	36.0	36.0	31.2	26.4	2 .6
NET INCOME	$(91.0)	$(72.2)	$(36.0)	$4.5	$26.3

Projected Cash Flow
Processing Operations (000's)

	Year 1	Year 2	Year 3	Year 4	Year 5
INFLOWS:					
Processing Fees	$ 47.3	$67.5	$101.3	$138.4	$155.3
Storage Fees	15.5	18.8	24.2	31.5	35.7
Administration Fees	30.0	30.0	30.0	30.0	30.0
Producer Fees	26.3	37.5	56.3	76.9	86.3
Grants	400.0	100.0	70.0	25.0	0.0
Loans	300.0	0.0	0.0	0.0	0.0
TOTAL INFLOWS	819.1	253.8	281.8	301.8	307.3
OUTFLOWS:					
Operations	146.6	162.5	209.1	218.4	231.9
Capital Items	600.0	20.0	20.0	0.0	0.0
Principal Payments	0.0	40.0	20.0	40.0	40.0
Interest	36.0	36.0	31.2	26.4	21.6
TOTAL OUTFLOWS	782.6	258.5	280.3	284.8	293.5
NET CASH FLOW	$36.5	$(4.7)	$1.5	$17.0	$13.8
Cumulative	$36.5	$31.8	$33.3	$50.3	$64.1

processing + trading Abattoir

Optimal size minimum 2400 = Animals = $600,000
Optimal scale = 3000 sq ft.
Smaller the with the project will be lesser.

Projected Balance Sheet
Marketing Operation (000s)

	Year 1	Year 2	Year 3	Year 4	Year 5
ASSETS:					
Cash	$ 20.3	$ 15.0	$ 15.2	$ 11.3	$ 12.4
Inventory	171.4	133.0	15.4	11.7	15.0
TOTAL ASSETS	**$191.7**	**$148.0**	**$30.6**	**$23.0**	**$27.4**
LIABILITIES:					
Operating Loan	$250.0	$250.0	$130.0	$ 70.0	$ 0.0
EQUITY:					
Start	0.0	(58.3)	(102.0)	(99.4)	(47.0)
Income	(58.3)	(43.9)	2.6	52.4	74.4
End	(58.3)	(102.0)	(99.4)	(49.0)	27.4
LIABILITIES & EQUITY	**$191.7**	**$148.0**	**$30.6**	**$23.0**	**$27.4**

Projected Balance Sheet
Processing Operations (000's)

	Year 1	Year 2	Year 3	Year 4	Year 5
ASSETS:					
Cash	$ 36.5	$ 3 .8	$ 33.3	$ 50.3	$ 64.1
Equipment/Buildings (net of depreciation	572.5	565.0	557.5	530.0	502.5
TOTAL ASSETS	**$609.0**	**$596.8**	**$590.8**	**$580.3**	**$566.6**
LIABILITIES:					
Term Loan	300.0	260.0	220.0	80.0	140.0
Grants	400.0	500.0	570.0	595.0	595.0
EQUITY:					
Start	0.0	(91.0)	(163.2)	(199.2)	(194.7)
Income	(91.0)	(72.2)	(36.0)	4.5	26.3
End	(91.0)	(163.2)	(199.2)	(194.7)	(168.4)
LIABILITIES & EQUITY	**$609.0**	**$596.8**	**$590.8**	**$580.3**	**$566.6**

13."10 con't

In preparing this analysis, the marketing and processing operations are founded largely on a break-even premise although combined profitability for these operations is in the order of $100,000 by Year 5. In light of the assets in place at the end of Year 5 ($594,000), this profit represents a return of 16% on capital.

However, the project is intended to provide significant returns to the local producers. Although production cost data is limited, the following scenario is not unrealistic:

	Total Producer Revenue	transportation. Costs ($I/lb)	Operating Costs (50$/lb)	Return On Labour/Management and Capital
Year 1	$225,750	$105,000	$>2,500	$68,250
Year 2	122,500	150,000	75,000	97,500
Year 3	483,750	225,000	112,500	146,250
Year 4	661,125	307,500	153,750	199,875
Year 5	741,750	345,000	172,500	224,250

Approximately 20 men can handle 200 animals per week in a harvest operation. With mobilization and the like, the total harvest weeks required (caribou/muskox) are estimated as follows:

	Number of Weeks
Year 1	8.0
Year 2	11.0
Year 3	17.5
Year 4	24.0
Year 5	27.0

13.10 con't

Based on these requirements, operating costs and labour-management returns are as follows:

Per Harvest Week

	Operating costs	Returns to Management Labour and Capital
Year 1	$6,500	$8,500
Year 2	6,800	8,800
Year 3	6,400	8,400
Year 4	6,400	8,400
Year 5	6,400	8,300

Returns to labour, management and capital can be sub-divided further as illustrated for Year 5 of the project.

Labour Cost	$123,000
Management	50,000
Return on Capital	51,250
Total	$224,250

The harvest provides significant returns to the local producers and their associated communities, and given the transporation costs are likely over-estimated, these returns are probably somewhat greater than outlined.

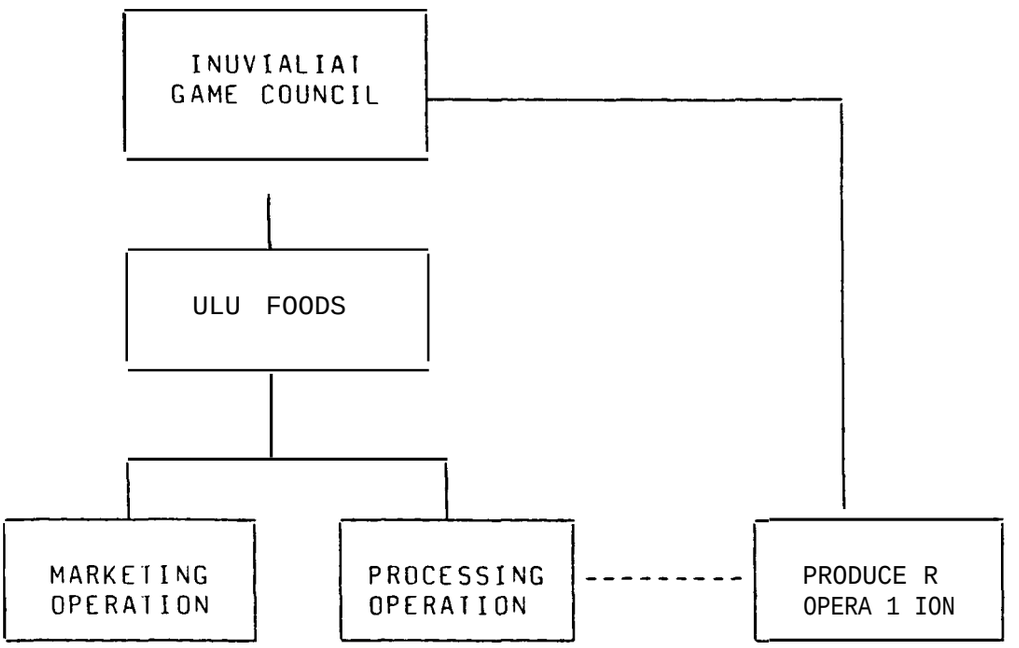
14.0
ORGANIZATIONAL PLAN

14.0 ORGANIZATIONAL PLAN

The proposed operations can remain within the current Ulu Foods entity. As outlined on the following page, the marketing and processing operations have been separated, largely for functional and profit centre control even though similar staff' will provide services to both operations. In fact, the marketinq operation has not direct staff positions. This division maintains ownership of the meat and non-meat products essentially sub-contracting the services For harvesting, processing, storage, transportation and marketiny. In addition to the direct marketing costs of distribution "and promotion; the marketing operation pays an administrative charge to the processing division ($30,000) and the parent organization ($10,000) to offset the time provided by staff members to perform the marketing functions. An additional charge to the producer organization provides for further funds to organize, administer and maintain capital assets for the harvest.

The major marketing effort is undertaken by the distributor thus alleviating the need for direct staffing in the export area. Within the local N.W.T. market, it is expected that whoelsalers and/or retail chains will provide the primary distribution systems. This reduces the overall complexity within the processing operation, its fundamental task being to ready the meats for sale and to establish and maintain contractual arrangements with distributors and wholesalers. This will be further supported by the parent organization which has been provided with fees to co-ordinate all operations and assert financial and administrative controls. The direct marketing costs (travel, promotion, etc.) are accounted for in the marketing operational budgets.

ORGANIZATION CHAR1



15.0
PROJECT IMPACTS

15.0 PROJECT IMPACTS

The proposed project results in significant impact to the local and regaional economies. Through utilization of a renewable primary resource which is sustained at no production cost, new wealth is generated on an on-going basis with no loss of resource and minimal capital investment to achieve added value. Given the five year projections, the table on the following page summarizes the gross value of the various components. The following notes are applicable:

a) Total value of meat and hide products produced is $4,783,500. This is the value of new wealth produced without depletion of the resource base (ie. future wealth is on-going).

b) This newly generated wealth provides direct benefits to the distributor and its employees as well as to storage operations in Edmonton. In addition, local trucking operations receive benefits which are passed on to employees and suppliers. Marketing costs arid interest payments provide additional employment generation and other income to suppliers and investors.

c) The parent company receives incomes to support employment and other costs. Producers receive in excess of $2.4 million which results in direct wages and payments to suppliers and transportation services.

d) Processing operations result in new employment plus expenditures to suppliers which generate further employment impacts.

(000's of dollars)		Projected 5 Year Totals
Total New Wealth Produced		$4,783.5
Paid to:		
Distributor		568.6
Storage (Edmonton)		87.5
10 Processing (Inuvik)		
Staff/Benefits	531.6	
Expenses	416.9	
Capital	120.3	1,068.8
10 Producers		2,434.9
To Trucking		151.4
10 Marketing Costs		18.3.5
10 Parent Company		162.3
10 Interest		250.2
Balance		(123.7)
Less: Capital Expenditure	640.0	
Less Equity	120.3	519.7
Add: Contributions		595.0
Net Loan Proceeds		140.0
Balance		91.6
Comprised of: Cash	76.6	
Inventory	15.0	91.6

15.0 con ‘t

e) Capital expenditures provide construction and manufacturing spin-offs to all areas of the economy.

The public injection of $595,000 will result in a multiplication of new wealth (8 times) over the first five years and on-going generation of the same at a rate of $1.5 million per annum. The sustainable nature of the project results in an extremely positive cost/benefit relationship, the majority of benefits accruing to the local population in the form of direct income which can be sustained over an indefinite time period.

APPEND I X “ A“

CRITIQUE

1985 MUSKOX SLAUGHTER

RANKS ISLAND, N.W.T.

Rex W. Coupland D.V. M.

POSSIBLE SOLUTIONS TO [illegible]
AT SLAUGHTER FACILITIES

1. Provide scabbards for butchers (washable type).
2. Provide hydraulic spreader or some other permanent cleanable device - consult small pack ing plants. Recommend supplying hard hats for Protection of crews.
3. Can eliminate some or all tarps if there is a separate skinning area and a gutting table or wagon.
4. Water supply would be much improved with a large reservoir continually heated.
5. Cleaning of rubber suits would be improved with long-handled brushes or some system of pressurized hoses. Waterproof boots should be looked into - facilitate washing.
6. Need a large reservoir of 180°F + water so sterilizer stations can be continually fed or changed without lowering temperature. Should have a continuous flow system that drains into a hole in the floor or outside.
7. Water testing - done by Health and Welfare before kill starts - pre-operational requirement.
8. provide head stand. Ability to wash stand.
9. Provide gutting table or wagon.
10. Need much improvement - wash gutting table or wagon and inspection table.
11. Provide stainless steel table with neoprime boards with legs instead of snow blocks. provide at least a galvanized metal table for packaging. Provide better racks for hanging meat prior to boxing. Use waxed boxes.
12. Increase number of lights, increase number of quartz" lights with special emphasis on gutting area, head and viscera inspection areas, and final inspection area, and the boning area.
13. Ease congestion by having separate skinning area and by having a gutting table where viscera slides out chute to outside where it is then dragged away. This would also ease problems with contamination and steam. Also, replace tripods with verticle members to side of the tent.
14. Possible to have a third flap centered over door seams so even if velcro doesn't stick, flap will cover hole anyway.
15. Herman Nelson should come with mechanic and parts or have second Herman Nelson on hand. It should be running before camp called in.
16. I strongly suggest hiring a consultant such as George Brenko who is familiar with plants, butchering, and inspection requirements. If he is used to assist in setting up the slaughter house, it would save time, effort, and reputations. He would already be familiar with the above requirements in slaughter plants, and what they use to solve such problems.

PROBLEMS DURING SLAUGHTER

CAMP IN GENERAL

A. Inadequate food supply - we essentially survived on muskox, pork, tea, bread, peanut butter, and the odd beef steak.

B. Inadequate fuel supply - we ran out of fuel and if bad weather had prevented the plane from landing, discomfort could have been considerable.
We also ran out of matches and ran very low on mantles.

C. Toilet facilities were non-existent when we arrived. It took four days to install. The importance of adequate toilet and wash facilities cannot be over-emphasized.

D. Personal comforts of inspectors minimal.

E. Safety.. - Not sure if there was any first aid supplies available.
The fire was a big hazard. Hardhats weren't worn.

POSSIBLE SOLUTIONS TO PROBLEMS

CAMP IN GENERAL

A. Would recommend hiring a camp cook.

This would have one person concentrating on foods. He would undoubtedly have a better inventory on hand - know ahead of time when supplies are getting low and remedy the problem immediately.
This would also provide a social atmosphere. It would be more pleasant if we got to socialize with the crews. As it was, everyone went back to their own tents to cook their own meals.
This would also save a large number of man hours when one considers the time spent in camp for each man to cook his own meal.
A good cook makes the camp. A bad one breaks a camp.
Failing this, a Person should be in charge of establishing and maintaining the food supply.

B. Inadequate fuel supply should not occur or even come close to occuring at any camp, particularly in the Arctic in December. Someone has to be camp supervisor to see that more than adequate supplies exist before camp and additional supplies ordered well before needed.
The same goes for having an adequate number of heaters, matches? lanterns, and mantels.

C. Toilet and washing facilities are a must.

They were eventually supplied but were minimal..
Some guidelines should be provided as to number of toilets, wash facilities, and showers for a certain number of people. Perhaps Health and Welfare could help.
It is totally unacceptable to have personel wandering around camp voiding indiscriminantly (to be tramped on in the dark, even if frozen, then walk into sleeping, eating, and slaughter tents) with next to no washing facilities.
Toilet facilities should be erected before the slaughter tent in an effort to maintain a clean camp.

D. It must be recognized that the inspectors will likely not be familiar with winter survival and camping techniques. Their well-being will be dependent on supervision by knowledgeable personel, and supplying them with appropriate equipment.

For example: If caribou skins are the warmest ground robes, it would be expected that they would be provided for the inspectors also.
Someone should do, assist, or instruct, on cold temperature operations of camp stoves, heaters, etc.
Tents should be banked and wind-breaked before inspectors called in.
Advice on defrosting tents, etc.
Personally, I would rather see some system of bunk trailers.

E. Safety - appears to be little concern or thought given to this area.

A first aid kit should be available. There was one frozen nose, several minor knife cuts, and a couple minor burns, but no first aid kit.

Fires are probably the most significant danger.
Living, heating and cooking in small tents, using kerosene and naptha gas where most stoves are near doors (that frequently have frozen zippers) is dangerous.
There were at least seven fires while we were at camp. Luckily, except for a couple of minor burns, nobody was hurt, but obviously there is considerable danger.
No fire extinguishers - probably most would freeze up in cold anyway; but some thought should be given to such equipment.
We did not experience it, but there was concern regarding potential for whiteout. I don't know if safety lines were on hand (they certainly were not up) should a whiteout have occured.

WI-IER.RECOMMENDATIONS

1. There be appointed one person as camp supervisor to keep track of fuel, pumps, first aid kits, rations, ground robes, etc.

2. There should be a foreman on the kill floor. He would work on the kill but would be the contact for inspectors for procedure problems, equipment, supplies, etc. It has to be a person on hand. at all times.

3. In transporting meats from camps by air, only meat should be flown. Hides, even if bagged, should be on separate flight. Plastic is essential and, on larger aircraft such as the Caribou, pallets should also be required. (Always required to carry fuel on their flights, so '. it's best to have the product off the floor where possible even though the plastic is used.
Due to the expense, we permitted hides (bagged) on the same flight as meat as long as it was well separated with plastic. However, things tend to get sloppy and there is no supervision of the trucking at the other end, so I feel the safest and most satisfactory method is to insist only edible products on a load. It means they may have to accumulate enough hides to make a separate load.
We should also be able to speak to truckers at Inuvik to be sure they understand how the meat should be handled.

4. Consideration of daylight hours. I think personel would have worked into abetter routine had there been daylight. Spirits would have stayed higher, muskox easier to find and drive, and more light for all slaughter activities. Late October, early November, or spring may be better slaughter times. [redacted] concerns regarding spring slaughters - humane movement of young calves, [redacted]

5. Based on this one experience I recommend that muskox not be rounded up until. after the slaughter camp is set up and supplies are in and equipment is functioning.

6. I recommend that inspectors not proceedto slaughter until it is confirmed by an impartial but concerned body (eg. NWT Game Dept.) that the camp is set up and functioning.

7. We did not stay around for the closing of camp, but I would like to know what happened to the plastic bags Of garbage=, I hope they were not left to the winds. I think in future slaughters, a camp supervisor

APPENDIX "B"

Agriculture Canada
HEALTH OF ANIMALS BRANCH
MEAT INSPECTION DIVISION

EPORT OF INSPECTION

Under the Meat Inspection Act and Regulations – R.S.C. 1952

DIRECTION DE L'HYGIÈNE VÉTÉRINAIRE
DIVISION DE L'INSPECTION DES VIANDES

RAPPORT D'INSPECTION

Sous l'empire de la Loi et des Règlements sur l'inspection des viandes – S.R.C. 1952

ACE VISITED – *ENDROIT VISITÉ*	DATE	EST. NO. – *ÉTAB. N°*
ULU FOODS	DECEMBER 8, 1985	

RM NAME – *NOM DE L'ENTREPRISE*

ULU FOODS, INUVIK, NWT

POSE OF VISIT – *BUT DE LA VISITE*

INSPECT PROCESSING FACILITIES AT ULU FOODS FOR MUSKOX SLAUGHTER EST 65

ONDITIONS FOUND AND ACTION TAKEN - *ÉTAT DES LIEUX ET CORRECTIONS*

Accompanied by Mr. Olov Jones, Mr. Marks manager of ULU FOODS, and Mr. Bob Delury (COPE consultant). We inspected ULU FOODS in Inuvik. Mr. Markswould like to process muskox slaughtered at the federal slaughter Dec. 9- Dec. 18, 1985 in ULU FOODS .

ULU FOODS is a retail establishment that sells meat (domestic and wild), food, gifts, and clothing.

In one section of the store is a ("BALLY FREEZER, BROCKVILLE, ONTARIO") room made of locking sheets of galvanized metal. The sheets are approximately 4' x 8' and are fitted to make a room approximately 16' x 20' - walls and ceiling. The floor is industrial linoleum - washable - with three 4" drains in corners. It is not known if the drains have "p" traps . Some of the joints of these metal sheets had a rubber seal but many did not, and around the windows there were no sealed joints. There is one pillar 1' x " in the room made of painted wood . His table tops are wood, with metal legs and galvanized metal lower shelf. There's also a wood chopping block.

Equipment band saws , stainless steel sinks (with copper pipes) . nylon and neo prime tubs .

Smokehouse is in another corner of the store (Storage area) - "ENVIRO-PAC PORTLAND, OREGON") burns wood chips.

Also in this area is a vacupac machine - ("ELPACK MODEL B-14, TORONTO"

Uses town water - chlorinated and fluoridated.

Cleaners used: Sunlight, S.O.S. Pads, Perfex, on floors Indo-Soo W.E. GRIER LTD. [illegible]

Comments – please see back
Cont. [illegible]

DATE OF REPORT
DATE DU RAPPORT _____

SIGNATURE _____

(62)

PERSONAL COMMENTS ON INSPECTION:

- Manager is conscientious and cooperative and will do what is asked to the best of his abiliit y.
- The store is run by COPE and has never made a profit and expenditures are not a concern.
- The general sanitation is not up to our standards - ~~@,ll - wood table tops, protein build-up on galvanized metal.
- Clarification will be required re sausage-making - addition of pork, recipes, and labels.
- Problems with other products - uninspected meats, cleaners. etc.
- Also, the meat processing room is an integral part of a retail store.

Overall, the sanitation is good, but not up to our standards, I am sure management will replace the table tops and seal the metal seams if we demand such. They will also scrub the place from top to bottom, Management has also suggested they would handle no other meats while processing the muskox. I expect they would even close the store for the period rewired to process the muskox. Thev would bring it to ULU FOODS from YOUNG'S FREEZER, process, then return to YOUNG'S FREEZER.

Personally I feel we either require an inspector here to supervise or should nave t - product sent out to another registered establishment for processing.

**Managemen of ULU FOODS should be contacted in the near future so they know what they will have to do to process this muskox.

Lex W. Caplette

ATE OF REPORT [illegible] 27, 1985