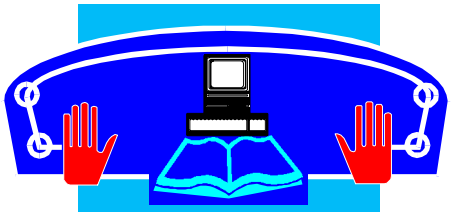

Baffin Region Fisheries Development Strategy Workshop; Issues Paper

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BAFFIN REGION
FISHERIES DEVELOPMENT STRATEGY WORKSHOP

ISSUES PAPER

Prepared for the

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INTRODUCTION

The Baffin Region Inuit Association (BRIA) has organized a Baffin Region Fisheries Industry Development Strategy Workshop to be held March 23 - 26, 1992 in Iqaluit. The purpose of this issues paper is to help focus the discussions at the workshop. BRIA's goal for the workshop is to formulate a regional level strategy for fisheries industry development for the next five years.

The title of the workshop project gives us some key definitions for our work.

Baffin Region - Many of you will be representing your community, but we want you to think regionally in this workshop. We must remember that our natural resources are not evenly distributed, and not all communities have the same opportunities for fisheries development. Some of our best opportunities for development aren't community based at all. In fact, we will be encouraging you to think not only regionally, but nationally and even internationally. Remember that currently by far the economically most important fishery for Baffin Region people is the highseas shrimp fishery. Right now Baffin Region fishermen are fishing shrimp off the coast of Newfoundland - shrimp which are destined for markets in Europe and Japan. That is a world scale fishery in which our Inuit fishermen are successfully competing! This is obviously not a community based industry, but the fishermen come from many communities and the substantial earnings they make contribute directly to community economies.

Fisheries - The workshop focus is on marine, or saltwater resources. We are not looking at freshwater fisheries per se. However, a specific sub-section of the workshop will be devoted to problems and potentials in the Arctic charr fisheries, since these fish spend a good part of their life cycle in saltwater. Our main focus will be on species which seem to offer the best potential for commercialization. These are shrimp, turbot (also called Greenland halibut) , and scallops. Often you will hear the terms inshore fisheries and offshore fisheries. These terms are often used in confusing ways. Some people think inshore means small scale, small boat fisheries, while offshore means big, expensive fishing boats. Really these words only refer to an imaginary boundary designed to keep big vessels out of coastal waters. In southern Canada vessels larger than 65 feet long are not allowed to fish in waters within 12 miles from shore. However, boats less than 65 feet long are often permitted to fish outside the 12 mile limit.

Industry Development - This workshop is industrially oriented. What we mean by that is comparatively large scale, technologically sophisticated fishing ventures employing a number of individuals, who derive a majority of their income from such employment. In other words, we are not focusing on artisanal fisheries. Artisanal fisheries are very small scale ventures. Usually involving only one or two people who derive only a minor portion of their income from

that activity. For example, a single Inuk who catches a few charr from his freighter canoe to sell or trade within his own village is an artisanal fisherman. However, a number of artisanal fishermen may provide the resource needed for a processing industry.

Strategy - A strategy is a plan which focus resources on the achievement of defined, realistic goals. Strategy implies making choices - sometimes hard choices - on where, when and how to use our limited financial and human resources. A key element in any successful strategy is the concentration of forces in areas where breakthrough results can be achieved. For us that means spending our money and efforts over the next five years on those development possibilities which offer the best hope of achieving signficant, sustainable economic benefit for the people of the Baffin Region as a whole.

Keeping these ideas in mind, the Workshop will be organized to look at the best development opportunities we have - shrimp, turbot, scallops, and charr. Each of these resources will reexamined from the point of view of development potential taking into account

- what we know about the resource in terms of abundance distribution and other biological characteristics,
- the important gaps in our knowledge indicating research requirements during the upcoming 5 years,
- markets for the resource in its various product forms,
- catching and processing technology, and
- business possibilities based on the resource.

We will also examine broader issues which impact each of the potential development sectors, including

- manpower deficiencies in the Baffin Region and how that effects fisheries industry development,
- the availability of financial resources from individual entrepreneurs, development companies and corporations, government and foreign investment.
- government fisheries policies including resource allocation, fisheries management, and other related policies.

The remainder of this Issues Paper consists of brief backgrounders on the important topics cited above.

FISHERIES RESOURCES & THEIR DISTRIBUTION\

Three of the four resources we are interested in are non-traditional species. Only Arctic char has long been utilized by Inuit as a traditional food source. None of the Baffin Region

communitieshas been located with a view to accessing shrimp, scallops or turbot.

What we know about shrimp and turbot indicates that they are very strongly associated with Atlantic Ocean waters. A huge warm ocean current called the Gulf Stream runs from the Caribbean Seaup the east coast of the United States and Atlantic Canada across the north Atlantic and into the Barents Sea north of Norway. An offshoot of this current runs up the west coast of Greenland into the Davis Strait. There, it mixes with cold Arctic waters flowing southward along the east coast of Baffin Island as far south as Newfoundland. This is the Labrador Current. It is the mixing effect of Gulf Stream and Arctic waters which forms the ideal temperature and food conditions for shrimp. Generally, shrimp are concentrated in areas where there is a lot of mixing of water bodies. A good example of this is the shrimp concentration found off Resolution Island.

The Davis Strait region is prime northern shrimp habitat. Two species are caught commercially, the northern pink shrimp (Pandalus borealis) and the slightly smaller striped pink shrimp (Pandalus montagui) . The shrimp quota in west Greenland waters is typically in the range of 40,000 tonnes per year. The offshore Canadian shrimp quota in Arctic waters is nearly half of the total Canadian offshore allocation - roughly 14,000 tonnes per year. Areas inside 12 miles of shore along Baffin Island have not been well explored, but there is strong indication of shrimp in the outer coastal waters from Resolution Island north to Home Bay, and PerhaPs farther north. Unfortunately, the waters of Hudson Strait seem to hold no shrimp, andwe presume that this is the case for Foxe Basin. These areas are entirely dominated by frigid Arctic water.

Shrimp are generally concentrated in waters that are from 100 to 500 meters deep, so they are not likely to be found in any numbers in shallow bays close to shore.

Turbot (Reinhardtius hippoglossoides) also seem to be associated with relatively warm Atlantic water and are very deep water fish. Thus they are normally found only a considerable distance from shore. The concentration of turbot near Pangnirtung probably results from unusual conditions peculiar to Cumberland Sound.

Thus, we can see that most of the communities in the Baffin Region will have no direct access to these resources for community based development using onshore processing plants.

We know very little about scallop resources in the Baffin Region. The species present in our waters is the Iceland scallop (Chlamys islandica) . These are widely distributed in the north Atlantic Ocean. In our waters they are at the extreme limits of their range. The cold waters result in small, very slow growing scallops. Research indicates that our Iceland scallops may take twice as long to grow to commercial size as Iceland scallops near Newfoundland. [illegible] taken place for scallops, mostly in

Cumberland Sound and between Lake Harbor and Cape Dorset. Scallops seem to be widely distributed, but densities are generally far below that required for commercialization. The best location found so far is right at the mouth of Pangnitung Fjord. Best scallop densities usually occur in water depths of 35 to 70 meters. Given the extensive coastline of Baffin Island considerable research effort will be needed to get a reasonable estimation of scallop distribution and potential for commercialization.

Compared to scallops, shrimp and turbot, we know quite a bit about Arctic charr (Salvelinus alpinus) distribution. Stream systems supporting Arctic exploitable Arctic charr populations are widely distributed throughout the Baffin region. However, the total exploitable biomass of charr is not large. The commercial allocation of charr has been set at about 250 tonnes in recent years, and total catches have averaged only about half that amount.

MARKETS FOR BAFFIN FISHERY PRODUCTS

The positive thing about shrimp, turbot, scallops and charr is that all of these resources are very well regarded in the world market.

Coldwater shrimps are very highly regarded and are produced in several product forms including cooked and peeled "cocktail" shrimp, whole cooked shell-on shrimp, and whole raw frozen shrimp. The most valuable product form is large raw frozen shrimp, the bulk of which is sold in Japan. The least valuable product is peeled shrimp. Other major markets include western Europe and the United States. Worldwide coldwater shrimp production exceeds 150,000 tonnes per year. The value of shrimp to the fisherman varies greatly and is highly dependent on quality. In Alaska shrimp fishermen receive as little as $.60 per kilo for their shrimp, whereas the average price of shrimp produced by Canadian factory trawlers was in excess of $4.00 per kilo last year. Quality control is the key to price. Despite potentially high prices for Baffin origin shrimp, harvesting and processing technology is expensive and operational costs are high, so making money in shrimp is no easy task.

Turbot is also a well established market item. Canadian turbot is sold domestically and in the US and European markets, while much of the north Pacific turbot production ends up in Japan. Headed and gutted, frozen at sea turbot sold for more than $2.50 per kilo delivered in Europe last year. Cumberland Sound turbot has sold at high prices in southern markets by being presented as fresh product during times when fresh turbot from other sources is generally not available. However, production and transport costs are also high. 'Turbot caught in offshore waters and frozen onboard the catcher boat bring lower prices, but volumes are substantial>' greater and per unit production costs are less.

Iceland scallops are currently selling for about $7.00 to $8.00 per kilo in southern wholesale markets. They are quite well accepted by consumers, but are not as highly regarded as the larger sea

scallops or the tiny bay scallops.

Charr is definitely regarded as a fine eating fish, but our charr has to compete in southern markets with rather inexpensive charr from Labrador, and with salmon from both the Atlantic and Pacific oceans. There is currently a great deal of salmon available, so prices for this type of fish are depressed and will likely remain so for a long time. Given the small amount of charr which the Baffin region can actually produce, all possible efforts should be made to fill market niches in the north and to produce value added products such as smoked charr.

In general we must remember that markets for fisher} products outside the north generally will not pay a premium price for our products just because they are produced in the north. In all cases the same product is available from other sources. We must compete on both quality and price. Fishermen too often seem to forget that fish is food. Markets everywhere are become increasingly quality conscious and its up to the fishermen and processors to give the consumer what he or she wants and at price which represents a good value.

CATCHING AND PROCESSING TECHNOLOGY

Shrimp are taken with trawl nets, mobile gear which is towed behind the fishing vessel. The technology for capturing northern shrimp is very highly developed after years of evolution in Scandinavia, Greenland and Canada. The trend in shrimp fishing over the last 25 years has been to put more and more of the processing onboard the fishing vessels. This is because shrimp are very perishable. On the most modern vessels, such as the Kinguk, and Atlantic Champion on which Baffin fishermen work, the shrimp proceed through a multi-stage process and are packaged and frozen right on the vessel within hours of being captured. The process is as follows:

1. Any trash fish (bycatch) and bottom debris is sorted from the shrimp catch.

2. The shrimp are then passed through an automatic grading machine which sorts them into as many as 7 different size grades.

3. Depending on market demand the shrimp then pass to the processing lines, with the largest shrimp being treated, then raw frozen in small (1 kg or 1/2 kg) packages for the Japanese market. Some of the large shrimp and most of the medium sized shrimp may go through a cooking line, where they are quickly cooked, then chilled and frozen under carefully controlled conditions. These shrimps are mostly exported to Europe. Shrimp that are too small to meet the product specifications for the Japanese or European whole cooked market, are frozen in 25 kg bulk bags. These are called industrial grade. They are eventually delivered to plants onshore where they are cooked and peeled to produce "cocktail" shrimp.

On the modern trawlers all the product is frozen onboard. This is

absolutely essential to preserve the quality of the product during the long voyages these vessels make. In fact, shrimp must be frozen \-cry quickly after capture. Even one day old iced shrimp exhibits , noticeable deterioration and cannot meet the standards for the highest quality product.

The vessels required for this type of fishery are often quite large, and are always complex and expensive. They have to be built to very high standards to withstand the heavy weather and harsh ice conditions of the Arctic. However, an interesting trend in vessel development in recent years has seen a number of "micro" factory trawlers developed. These are highly capable little vessels as small as 73 feet long, whereas many of the highseas factory trawlers are as much as 200 feet in overall length. These smaller vessels may be well suited to development of near shore shrimp stocks in Baffin Island.

Turbot are normally caught by vessels using either trawl or longline gear. Longline gear is called fixed gear, and consists of a groundline which may be several thousand feet in length, to which are attached numerous shorter lines (gangions) with baited hooks. Longlining generally catches larger turbot than trawls , and produces a better quality fish. However, longliners cannot produce the tonnages that larger trawlers can, and generally haven't proven as economically effective as trawlers. Nonetheless, both types of gear have their appropriate applications in taking turbot commercially. The though-the-ice longlining method used at Pangnirtung is a unique and effective adaptation of the basic longline gear to the specific conditions in Cumberland Sound, and demonstrates that unique solutions may be applicable to certain fishing opportunities.

Turbot do not have outstanding keeping qualities. Accordingly, most of the turbot caught at sea is frozen on board the vessels to maintain quality. Most frozen at sea product is headed and gutted (H&G) fish, which is later reprocessed as fillets or steaksat shore based plants located near the end users. At Pangnirtung fresh product is successfully produced by taking great care with the fish and flying the product out to southern markets at frequent intervals. The Pangnirtung fishery produces whole, dressed (gutted) - fish, as well as fresh steaks and fillets.

Trawlers for turbot fishing must be large and powerful, as these are very deep water fish. Longliners need not be so large, but most of the offshore longliners are larger than 100 feet simply because of the weather conditions encountered. Whether smaller longliners , can be successfully used in possible summer fisheries for turbot in Baffin has yet to be proven.

Scallops are caught with specialized gear know as scallop dredges. Several types exist. Smaller vessels in Canada tend to use "Digby buckets", while larger, more powerful vessels use heavy dredges up to 12 feet wide. The gear is dragged over the bottom and the scallops are captured in heavy bags made of interlocking steel

rings. Scallop dreges normally bring up a lot of stones and bottom debris, so the first step in scallop processing is the hand separation of the scallops from this unwanted debris.

Traditionally, scallops are "shucked" by hand. This consists of opening the scallop shell with a special knife, removing the unwanted guts and cutting loose the adductor muscle. It is this muscle which we commonly refer to as a scallop. Good scallop shuckers can do 8 to 10 scallops per minute, which is an acceptable rate with large scallops. Yost scallop vessels shuck their scallops onboard, but some deliver live scallops to shore plants for shucking. The scallops are held in circulating seawater tanks on the vessel.

The problem with our Arctic scallops is that they are small. Hand shucking is tedious and slow. However, several companies make automated shucking systems which eliminate this hand work. The scallops are held in warm water for about 20 minutes. 'This causes the scallops to relax and open up. They are then quickly dumped into boiling water for about 20 seconds. This kills the scallop without actually cooking it, and loosens the edible muscle from the shell. The scallop animal is then shaken loose from its shell. The guts are then removed from the meat with a machine which works like a shrimp peeling machine. Fully automated processing lines have been developped to do this. However, the technology is very expensive and requires large amounts of raw scallops in order to be operated economically. Investigations are now going on to adopt the basic principles of this system to small scale, semi-automated processing which may be suitable to our Arctic conditions. Such plants could be located onshore, or on a fairly small catcher /processor vessel.

Charr can be effectively taken in saltwater using either gillnets or traps, and in freshwater using gillnets, weirs, or by jigging. Weirs and traps have the advantage of producing fish without net marks. They can fish unattended. The fisherman can take the fish in live condition pretty much at his convenience. Gillnets offer the advantage of mobility. They can be moved to various sites easily as conditions demand, and can be used successfully under ice. But, they must be carefully tended inorder to produce good quality fish. Jigging is a simple and inexpensive method which also produces excellent quality, unmarked fish. Most fishermen take their charr in winter fisheries and sell the fish whole frozen. Markets for charr exist at local, regional and export levels. Some fish processors in the Arctic are now doing value added processing here. Smoked charr has added value, and is not as heavy as fresh fish. Since virtually all charr that is exported is flown out of the region, this weight reduction, coupled with higher value is an important factor for the processor.

MANPOWER

One of the major problems facing fisheries development in the Baffin region is the lack of skilled and experienced manpower.

Although Inuit have a very long and intimate association with the sea, they don't have a maritime fishing tradition. Fishing, and the seafaring life are not traditions which can be created overnight. In countries like Norway the fishing tradition is many centuries old and many regions of the country have developed almost entirely around fishing. The society is very much oriented to supporting that activity. High levels of specialized training are available from high school onward, and are integrated into the fishing industry itself and into all of the support industries such as boat building, marine engineering, seafood processing, etc. We, on the other hand, are starting from scratch.

The offshore shrimp industry has proven to be an effective training ground for Inuit interested in fishing careers. Inuit trainees are placed aboard ships managed by very highly skilled and experienced officers. They are exposed immediately to the requirements of a high tech, quality oriented fishery. These vessels are controlled environments where the recruits can develop the strong work ethics required for success in fishing. They are supported by onshore training programs. Eventually there will be Inuit captains on some of these vessels. Already, after only a few years, there are Inuit in officer positions such as factory chief. In Greenland this process has proceeded much farther, but has taken many years.

It must be stressed that high levels of responsibility in vessel management require effective language skills. Effective reading and writing in English are very important. Fishing is a very technical enterprise. Even small fishing boats are filled with complicated equipment - diesel engines, radars, navigation systems, etc. Each of these systems is accompanied by detailed technical manuals. Effective use and maintenance of this equipment requires the use of these manuals. Further, the fishing industry is a rapidly changing, international industry. Good new ideas in technology, fishing methods, product forms and marketing come from all over the world. Operators can only keep up with developments through reading the international fishing press and government technical materials.

Further, we must remember that every fishing venture, no matter how small, is a business. Even small businesses require a lot of interaction with buyers, shipping agents, suppliers and government. It is amazing how knowledge intensive the fishing industry is, so language and business skills are essential. Because education in the north is a relatively new thing, many Inuit are not well prepared. It may well be that for many Inuit wanting to get into fishing English and math courses will be every bit as important as other training.

Another thing which is important to remember is that not everybody who is recruited into the fishing industry is going to stick with it. Take the guys recruited for the big shrimp trawlers. A high percentage don't work out. There is a certain number who just won't work hard enough. Some just don't get over seasickness. Then there are those who just eventually come to the conclusion that fishing isn't a career for them. Long separation from family and continuous

sea duty just aren't for everyone, regardless of their talents. So, out of any group, only a small percentage will make fishing a long term career choice. Even in Norway, where fishing has deep roots in the culture, most people who try fishing don' t make a career out of it. In fact, our drop-out rate among Inuit fishermen is not as high as would be expected, and good Inuit recruits are being sought even by vessels which have no contractual obligation to employ Inuit.

It should be stressed again that even some of the best offshore Inuit fishermen may eventually want to spend more time at home. But, the skills they learn on the large vessels need not be lost. Their training and experience will be valuable in managing, maintaining and operating smaller scale ventures closer to home.

RESEARCH

Commercial marine fishing in the Canadian Arctic is still in its infancy. Every development we now see has gone through test fishery stages. Finding out more about our resource base is absolutely essential if the industry is to grow and diversify. And, research must also be done on the best way to utilize the resources and to acheive maximum longterm benefit for the north. An important aspect of the Workshop will be to define our research goals for the next five years. Even though we will be concentrating on four main resources, we should be on the lookout for unexpected research findings and development opportunities.

BUSINESS DEVELOPMENT

Our ultimate goal is to develop businesses which provide sustainable opportunities for Inuit of the Baffin region. We need to strengthen existing fisheries enterprises and to identify new opportunities. These may range from small scale seasonal enterprises to large, year round operations which actually involve Inuit in resource development outside the region.

There is a tendency to be defensive about our position. This in understandable. After all, Inuit have been fighting for years to get basic recognition of our rights here in Nunavut. But, we must remember that almost all of our commercial fishing development requires a strong interaction with the outside world. We sell our fish in southern Canadian markets, and Inuit shrimp resources are much sought after in Europe and Japan. We use technology developed and manufactured elsewhere. And, we can learn a great deal from highly skilled and experienced people from outside our region - not least, from the very successful Inuit fishermen and businessmen of Greenland.

Joint ventures with fishermen and processors from outside the Baffin region, including other Inuit, may prove vital to the successful development of our resources. Let's look at a couple of possible examples.

The turbot industry in Pangnirtung has acheived a great deal in the

past few years. But, the fishery is highly seasonal and the processing facility there can only employ plant workers for a few months out of each year. Further development of offshore turbot resources could provide additional direct employment of Inuit in fishing and additional supplies of turbot which might be processed in Pangnirtung. However, inorder to be successful such a fishery might need to use very expensive fishing technology which needs to fish elsewhere inorder to be economically viable. A joint venture between a Baffin business and perhaps a Labrador or Greenland company might work out very well in this case.

The same might be true of shrimp. Our northern fishing season is very short, making it very difficult to pay for the kind of vessel needed. However, there are fishing enterprises in both Greenland and in the Gulf of St. Lawrence who have shrimp which can be accessed when our waters are still frozen over. By combining allocations, groups in Baffin and elsewhere might be able to joint venture a fishing vessel which would allow each group's otherwise uneconomical resource to be successfully harvested.

This same principal can be applied inside our region. Fishermen from several communities might pool their Arctic charr quotas to supply a jointly owned smokery which none of them could afford individually. Or, small scallop resources near several communities might be harvested and processed by a vessel jointly owned by businessmen from each community.

Pooling our efforts may prove essential in developing some of our resources, and is often away of accessing better technology and expertise, and additional resources.

FINANCING

Finding the financial resources to start and maintain a fishing venture is often difficult, particularly for first time entrepreneurs in remote and newly developing areas like the Arctic. Fishing is considered as high risk by financial institutions. This is because there are so many factors which are beyond the control of the fisherman - adverse weather, natural fluctuations in fish stocks, highly changeable market conditions, and so forth.

In Canada the industry has been plagued by overcapitalization (too many boats chasing too few fish) and generally depressed conditions in key fisheries for many years. so most Canadian banks are not interested in financing fishing enterprises that do not already have a strong track record. Often it has been easier for new Canadian ventures to find financing from foreign banks which have more experience and interest in fishing venture financing. This has been particularly true for large scale ventures. However, these banks are usually not interested in small fishing businesses.

Governmenthastaken up much of the slack in financing small fishing vessels. Indeed, the government has clearly financed too many boats in some areas, and has seriously contributed to the over

capitalization problem. Nonetheless, government funding support will undoubtedly be very important in' assisting new business start-ups in the Baffin Region.

Although each fishing enterprise may vary considerably, there are some general "rules of thumb" applied to the economics and financing of fishing vessels which tend to prove out in most cases.

It is generally accepted that small fishing vessels must earn an amount each year that is equal to the cost of the vessel. So, if your vessel has cost you $100,000 you can roughly figure that your total sales of fish - your "gross stock" - must be $100,000 per year inorder to have a going concern and make a decent return on your investment.

Where does all that money go? Well, another rule of thumb is that the gross stock is divided "1/3 to the crew, 1/3 to the gear, and 1/3 to the boat". This means that 1/3 is paid out to the crew as crew shares, 1/3 is used to cover costs of gear and operations, and the remaining 1/3 goes to paying for the boat, its depreciation and maintenance, and to return on the owner's investment – that is the cash which the owner has put up to start the venture.

Generally speaking the owner's equity investment is required to be at least 30 percent of the cost of the vessel in the case of a new vessel , and owners are usually required to post a personal guarantee for the amount which is financed. Financing terms are usually from 7 to 10 years for new boats. Used vessels typically require higher levels of owner equity (40 to 50 percent of cost) and are usually financed over shorter terms, 5 to 7 years being typical. Accordingly, a used vessel, while costing less overall, can often carry annual payments equal to those of a more expensive new vessel, and may require just as much "up front" cash from the owner. These are obviously rather tough financing standards, but they reflect the experience of banks in fishing industry financing.

Government funding assistance can change this picture quite a bit. Grants and loan guarantees can lower the initial cost of purchase and the longterm payback costs, and can greatly reduce Your financial exposure. But, remember that such assistance only helps you with respect to that portion of your gross stock which is applied to vessel payments and return on your investment. The following chart illustrates the difference between a typical bank financing and a hypothetical government supported financing for a $100,000 boat.

As you can see, the government supported financing actually totals $10,000 more than the bank financing would have cost you, but your annual vessel payments would be reduced by about $2,000 per year during the first critical years of your business. What's more, you've only got $10,000 into the venture, so you need less profit to make a fair return on your investment - say just $1,000 instead of $3,0 00<., That's about S4,000 per year less that you have to make to be doing OK, and can be pretty important. But, if we go backto

that rule of thumb about your gross stock having to just about equal your vessel cost you can see that the government assistance doesn't really change the picture radically once you get into business. It can be a big help in getting started, but the fishing still has to pay the crew, pay the operating costs, and pay for the boat.

The point of this discussion is to demonstrate that government funding assistance can be important, but that it does not fundamentally effect the operating economics of a fishing enterprise. Business plans for any fisheries venture must still meet the basic criteria for success. In the Arctic this will be difficult, and we should not be blind to that fact.

Over the next four years the Government of the N.W.T. will be putting nearly $500,000 per year into fisheries industry development in the Baffin region. This money will be available for a variety of projects, from support of pure research, to pilot projects, to actual development. While this sounds like a lot of money, it really is not very much when all the possible demands are considered. Fortunately, there are other sources which can be made available. The Department of Fisheries and Oceans, and the Canadian Aboriginal Economic Development Strategy program can provide funding assistance for a variety of fishery related projects. However, there is no doubt that Inuit organizations and individual fishermen will also have to put some of their own money into projects. So, we must use our resources wisely and try to design our development strategy to acheive the maximum economic benefit from the limited financial and fisheries resources available.

SOME POSSIBLE DEVELOPMENT PROJECTS

This section of the Issues Paper consists of brief outlines of some development possibilities. These are ideas to think about. BRIA hopes that you will bring forward some of your own ideas too.

A Summer Turbot Fishery in Cumberland Sound

Longlining for turbot in and near Cumberland Sound could provide additional opportunity to utilize this species inorder to supplement the existing winter/spring, through the ice fishery. If turbot resources can be located near Pangnirtung they might be fishable with comparatively inexpensive, small vessels. If the fish can only be found offshore, the larger vessels required could deliver some or all of their catch to the plant in Pangnirtung for processing.

Processing Plant Upgrades at Pangnirtung

The existing processing facilities in Pangnirtung are barely adequate for the existing fishery. There are no freezing facilities, which means that fishing must cease when the market for fresh fish weakens due to the late spring availability of fresh southern product. Upgraded facilities could allow the existing fishing to Continue longer, and could provide a point of sale for summer caught turbot and for other species such as char or scallops.

Small Shrimp Trawlers

If the existence of shrimp stocks within the 12 mile limit can be proven there is the possibility of new allocations. Small factory trawlers could be used to capture and process shrimps to world market standards. Despite the very short northern season the fairly expensive boats required could be economical if developed on a joint venture basis with fishermen from other areas such as Labrador, the Gulf of St. Lawrence, or even Greenland.

Charr Fishermen's Cooperative

A regional charr fishermen's coop could provide many benefits for fishermen including joint marketing, brand name identification, setting of uniform quality standards, bulk purchasing of fishery supplies, and shared administrative support. Such a group could also joint venture or run its own value added processing facility such as a smokery at a central location like Iqaluit.

Scallop Catcher/Processor

If research can identify sufficient scallop resources, a small vessel with onboard processing and freezing could allow many small, dispersed scallop beds to be developed. Such a project would be particularly attractive if research into semi-automated shucking technology proves successful.

RESEARCH NEEDS

Identifying resources is the first step toward development. Research needs to be supported in many areas. Some key resource assessment projects include:

Continued Shrimp Exploration

Areas along the south coast of Baffin Island have been fairly well explored. At Resolution Island a fairly substantial resource of pink striped shrimp has been clearly identified. However, extensive research in Hudson Strait westward into lower Foxe Basin failed to find shrimp. Offshore, large concentrations of pink shrimp have been identified and are being fished with large factory trawlers. However, the waters inside 12 miles from shore along the east coast of Baffin Island have yet to be explored. There have been indications of shrimp as far north as Home Bay. The potential for high value shrimp fisheries makes this exploratory research a *very* high priority.

Scallop Research

The Lake Harbor and Cumberland Sound areas have been explored for scallops with disappointing results so far. Only one interesting scallop bed, has so far been located, a small area right at the mouth of Pangnirtung Fjord. A great deal of additional research effort is needed. A multi-year project such as that done in northern Quebec will be needed to provide a good assessment of possible scallop resources.

Turbot Longlining Studies

A comprehensive look at turbot longlining is required to identify exploitable resources and to assess the best technology for development. Both small and large vessel technology should be examined.

BAFFIN REGION FISHERIES DEVELOPMENT STRATEGY WORKSHOP

March 23 - 26, 1992, Navigator Inn, Iqaluit, N.W.T.

AGENDA

Monday, March 23rd

9:00	Invocation	Reverend Micheal Gardiner
9:10	Opening Remarks	Pauloosie Keyootak, President Baffin Region Inuit Association (representative) Department of Fisheries and Oceans
9:30	Introduction	Greg Fisk, Workshop Chairman
	Approval of Agenda	
10:00	Coffee Break	
10:15	WHERE WE ARE IN FISHERIES NOW!	
	- Scallops	Peter ~~Antilliak~~ Kavayak Kevin McCormack
	- Shrimp	Neil Greig Noah Metuq
12:00	Lunch Break (Buffet	Working Lunch)
1:00	- Char	Jerry Ell Larry Simpson
	- Turbot	Johnny Mike Paul Comeau
2:30	Coffee Break	
2:45	FISHERIES RESOURCE MANAGEMENT Science and Regulation Allocation and Licensing	
	MANPOWER Unemployment and Opportunities - Training	
	FINANCIAL RESOURCES - Private - Government	
4:15	Open Discussion Period	
4:45	Adjourn for the Day	

Tuesday, March 24th

WORKSHOPS ON TURBOT AND CHARR

9:00	Introduction to Workshop Concepts
9:30	Break into Workshop Groups (Turbot or Charr)
12:00	Lunch Break (1 hour)
1:00	Re-Convene Workshops
4:00	Workshop Reports and Recommendations
4:45	Adjourn for the Day

Wednesday, March 25th

WORKSHOPS ON SHRIMP AND SCALLOPS

9:00	Break into Workshop Groups (Shrimp or Scallops)
12:00	Lunch Break (1 hour)
1:00	Re-Convene Workshops
4:00	Workshop Reports and Recommendations
4:45	Adjourn for the Day

Wednesday Evening, March 25th

BAFFIN SEAFOOD BANQUET
Navigator Inn, 7:00 Pm

Thursday, March 26th

PLENARY SESSION

9:00	General discussion on the findings and recommendations of the Workshop Groups to formulate Strategy Goals	
12:00	Lunch Break (1 hour)	
1:00	Re-Convene Plenary Session	
4:00	Chairman's "Wrap-up'"	
4:30	Closing Remarks	Pauloosie Keyootak, president Baffin Region Inuit Association
4:45	Adjourn the Workshop	

K. T.

PRELIMINARY REVIEW DRAFT

File

ISSUES PA PER

Note: The following draft contains the narrative background of the Issues Paper. A variety of maps and charts are in preparation to accompany the final paper. These will include:

1.) Resource distribution maps depicting both Baffin resources and competitive world resources;

2.) As available, graphically depicted world marketing information on the target species;

3.) Tabular and graphic financial information on both available funding resources and vessel financing models; and

4.) Graphic depictions of fishing methodologies.

In addition work is underway to have some of these same materials prepared in large scale visual graphics form for use in the workshop. Price allowing, high quality base maps and overlays will be prepared., to assist speakers in the meeting rooms.