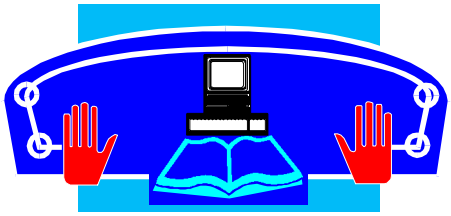

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NWT Fisheries

Local Involvement Case Studies

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Introduction

In this paper we present four case studies that show the importance of community involvement in fishery development in the NWT. They include:

- Cambridge Bay Fishery
- Arviat Fish Plant
- Pangnirtung Fishery
- Clyde River Char Enhancement Project

The studies indicate that although community involvement is a critical factor in development of a successful fishery it is not the only critical factor - to name the more important ones, good management, low operating costs, sound markets and steady supply are also critical factors. Thus, we can conclude that a number of factors are required working *together* for development of a successful fishery. Still, community involvement and community control are important and necessary over the long term if a fishery is to be successful.

The case studies also suggest that where community involvement and control are strong in a fishery, government should support the responsible local organization in the fishery rather than attempt to replace the organization, even if in the short-term there appears to be conflict between government and the organization involved.

Cambridge Bay Fisheries

Overview

By all accounts, government started the Cambridge Bay fishery in 1965 primarily as a means of providing inexpensive food to residents unable to harvest and as a replacement source of food for caribou which at the time had become scarce in the Cambridge Bay area. In the first year of operation harvest in the fishery totaled 17,955 kg, with fish taken by gill net in Cambridge Bay and Wellington Bay.

Keeping in line with a new government policy to encourage increased community control and involvement over development, around 1977 the government transferred ownership of the fishery to the Ikaluktutiak Co-operative of Cambridge Bay. At the time of the transfer, the understanding was that the Co-operative would have responsibility for harvesting, processing and marketing of arctic char. On the part of the Co-op, taking over the fisheries was seen as a means of creating jobs and income for local fisheries as well as profits for the Co-op.

Since the transfer of the fishery, the Co-operative has achieved most of these objectives and, until recently, been considered the most successful fishery in the NWT. For example, under the Co-op's management, commercial char landings have consistently averaged about 45 tonnes a year with landed values in excess of $200,000. Moreover, over the years the Co-op has been able to earn a profit from the fisheries (in 1986 and 1987 alone $65,402 and $116,156 per annum respectively), use the profits earned to pay fishermen dividends and reinvestment into Co-op operations. In the process, the Co-op has also been able to create 70 seasonal jobs and create income for those employed as fishermen or plant workers - a significant contribution in a community and region where jobs and income opportunities are severely limited and per capita earnings are low.

Although the Co-op has been successful in developing the fishery, it has suffered two set-

backs. The first, in 1988 when the Coop applied for ED&T contribution finding ($85,000) to offset the cost of repairing, renovating and expanding the fish plant - the application was rejected.

The second, in 1992 when the GNWT negotiated an exemption for char from the FFMC marketing monopoly. At the time it was felt that the FFMC was not directing adequate effort and resources to marketing char resulting in low market prices for char and less than optimum prices for char fishermen. The exemption however, left the Coop without a market for its own arctic char - product it had up to 1992 been selling to FFMC.

The Coop appealed to ED&T for marketing assistance and was referred to the NWT DevCorp. However, the Coop and the DevCorp were unable to reach a satisfactory working relationship, The DevCorp was unwilling to purchase char at the price asked by the Coop and the Coop was unwilling to accept the price offered by the DevCorp. Consequently, the Ikaluktutiak Co-op did not fish its char quota in 1992, which meant the Coop did not earn a profit from the fishery.

The DevCorp has offered to take over the operation of the Cambridge Bay fishery and build a new fish plant in the community - infrastructure that is badly needed if the fishery is to stay in business and diversify its product range. However, according to the Co-op manager, the Co-op is not interested in that kind of arrangement because the DevCorp requires controlling shares (5 10/0) of the new fish plant,

The Co-op is now at an impasse. On the one hand it cannot sell its char product into the market place and earn a profit - something it has always been able to accomplish. On the other hand, it does not want to divest itself of ownership and control in the fish plant - a DevCorp condition for its investment into a new fish plant.

Local Involvement

The Cambridge Bay fishery operates on a fly-in, fly-out basis. Fishermen fly in to fish

camps in the spring and travel by boat in the fall where they use both gill nets and weirs to capture char on their spring and fall runs. Char is then flown out from various fishing sites to the fish plant in Cambridge Bay where it is processed and shipped fresh or frozen to market. The high costs of flying the char to the processing plant and problems associated with variable weather conditions frequently result in high costs and supply problems. Thus, there is significant risk to operating the fishery and no guarantee that the Co-op will always earn a high annual profit.

The day-to-day operations of the fishery are overseen by a manager who is responsible for all aspects of the fishery. In turn, the manager reports to a Co-op Board of Directors elected by Co-op members which includes approximately 90°/0 of the residents in the community.

Co-op management of the fishery has provided stability and continuity to the Cambridge Bay char fishery. This stability, combined with the presence of a strong local fisheries manager and a niche market for char have been identified as major factors in the success of the fishery, The availability of a large stock of "char and community members to participate in the fishery and to fish in isolated regions has also been identified as critical to the success of the fishery.

The Co-op has also successfully been involved in management and allocation of fish quotas in the region with DFO and the local HTA. The system involves DFO setting quotas on rivers, assigning the quotas to the local HTA, and the Co-op and HTA deciding together who will get the licenses, Thus, conflicts and allocation of quotas are resolved jointly between the Co-op and HTA, and if there are any major decisions to be made effecting everyone in the fishery then the Co-op consults with the fishermen and a public meeting is held.

The extent of co-operation between the HTA, the fishermen and the Co-op also extends to transportation, profit sharing, credit, purchase of supplies and training support. In regards to transportation, the Co-op has entered into an agreement with the local HTA to provide transportation to fishermen. In regards to other areas, the Co-op provides

fishermen with a negotiated initial price for their catch and a second payment equivalent to 85°/0 of the profit from the fishery as a producer dividend. The Co-op also provides credit to fishermen for gear, camp equipment and food; delivers supplies free of charge to the camps; and provides training to fishermen in quality control of catch (e.g. how to reduce bruising) which, in turn, has meant a higher price for product shipped.

The Co-op's successful management of the fishery has meant up to 70 people employed on a seasonal basis in the different aspects of the fishery and, significantly, people that would otherwise be on welfare, Fishermen are also eligible for UIC - although it is unknown whether anyone has received UIC benefits. Moreover, all money from the fishery stays in the community, including transportation costs for transporting fishermen to fishing sites and fish from sites to the plant in Cambridge Bay.

Although average net income earned by fishermen in the fishery is low (in 1990/91 about $831 per fishermen), the income earned represents an important source of cash for a group who are older and have few other sources of available income. The money earned is also often used to offset the high cost of purchasing boats, motors, snowmobiles and other equipment used in subsistence fishing and hunting

Conclusion

The Ikaluktutiak Co-op fishery is the only example of a commercial fishery in the NWT that has successfully been managed and operated by a local organization over an extended period of time - one that has maximized returns to fishermen and the community, and significantly with minimal government support. The future of this fishery is now in question, especially if the Co-op is unsuccessful in securing a strong market for its fish product with prices that will cover costs. If not, it is likely that the fishery will be taken over by another agency. The loss of the fishery would be a major set-back to the Co-op's and community's development.

Arviat Fish Plant

Overview

Arviat (population approximately 1, 100) is the southernmost community in the Keewatin There are few employment opportunities in the community and the primary economic development activities consist of hunting, trapping, and some wage employment. Unemployment in the community has been estimated to be approximately 28%.

In the mid 1980s a group of local Arviat fishermen discussed the possibility of establishing a fish plant in the community that would process arctic char for resale to southern markets (including Churchill) and within Arviat during the off fishing season when arctic char was not available and local demand high. These fishermen felt a fish plant would be an effective means of helping local fishermen earn additional income. Through William Angalik's father these ideas were passed onto his son.

In 1985, William Angalik phoned FFMC in Hay River and then FFMC in Winnipeg to inquire if the corporation would be interested in purchasing arctic char from the community. Corporation officials said yes, they would be interested, especially for fresh arctic char, and William decided to start buying fresh arctic char for resale to the corporation.

In the summer of 1986 William Angalik established himself as a fish buyer, operating from a small shack in the community with an ice making machine where fishermen brought in their freshly caught fish. William purchased fish on a cash basis, repacked the fish in ice, then shipped product south with the airlines to FFMC in Winnipeg. In the first year of operation William purchased about 24,000 lbs. of fresh arctic char at $1.10 "per lb. which he resold to FFMC for $1,50 per lb., thus earning a gross profit of 40 cents per lb.

In 1987 and 1988, William continued the same process, and although the volume of

purchased fish declined he was still able to earn a reasonable gross profit - enough to make the business worth the investment of time and money. Indeed William estimates that by 1988/89 the fish plant was able to earn a net profit of approximately $15,000 for the season.

In 1989, William decided that if volumes were to increase he would have to have larger facilities and better equipment to hold more fish. Since an older building - once used in the community as a country food store - was available, William arranged to buy the building for $15,000 and to base his fish buying operation from the building. Still, the building was no more than a shack, and William still needed equipment to freeze the fresh fish since spoilage was high within the operation.

In 1990 ED & T officials arranged for William to purchase a portable fish plant at a cost of approximately $180,000 including freight with the understanding that William would put up $18,000 in equity, assume a loan of $35,000 and finance the remainder of the purchase through an NWT Development Corporation (DevCorp) investment. In turn, the DevCorp would assume 30 per cent ownership in the company with William, his father and brother having the remaining 70 per cent ownership.

Since then, William's operations has been disappointing. As shown in Tables 1 and 2, volumes have declined, revenues declined, gross profits declined, and rather than earning a modest profit William has continued to lose money. Indeed, by 1992/93 William had little remaining working capital and was reluctant to operate the business for fear of incurring further losses.

With the prospect that its business partner would not operate the fish plant, and local fishermen would have no outlet for their fish catches, the DevCorp arranged to have a local husband and wife team assume plant management for the 1992/93 season. When William heard of these plans he immediately removed all plant equipment from the building. This was done because he believed the DevCorp was acting unilaterally and the equipment was owned by him separately from his joint plant ownership with the DevCorp Corp. This resulted in further delays in starting the fish plant for the 1992/93 season until

arrangements were made by the DevCorp to replace the equipment. With these delays the fish plant was only able to operate for three weeks over the season. Further compounding difficulties was a DevCorp decision to pay local fishermen only $1.50 per lb. for **arctic char** while **the local Northern** Store offered $1.75 per lb. for arctic char. With the short season and lower price offered fishermen the fish plant was only able to purchase a total of 1,000 lbs. of arctic char for the entire season - recording its worst ever year of operation

William does not yet know what he will do for the season, nor does the DevCorp Corp. The husband and wife team hired for the 1992/93 season also do not plan on working for the DevCorp for the 1993/94 season and feel the whole experience has generally been poor and should not be repeated.

Worsening the fish plant's declining revenues and increasing losses has been a severe drop in the fish resource in the south Keewatin fisheries. DFO officials **have reported declines in a number of communities in the south** Keewatin **and over the next two years plan to consult with the affected communities and monitor and assess fish resources very carefully, There is considerable** concern that if fish stocks continue to decline, arctic char as a community food source might be threatened in south Keewatin communities, including Arviat.

TABLE 1 Estimated **Arviat** Fish Plant Volumes and Earning **By Lb. (1986-1993)'**

Year	Volume	Price Paid Fishermen	Selling Price	Gross Profit
86/87	**24,000**	1.10	1.50	40 cents
87/88	21,000	1.35	1.50	15 cents
88/89	20,000	1,50	3.00	1,50
90/9 1	18,000	1.75	2.20	45 cents
91/92	9,000	2,00	2.20	20 cents
92/93	1,000	n/a	n/a	n/a

*Estimates in Table 1 are based on information obtained through interviews with William Angalik on six years

TABLE 2 Estimated Arviat Fish Plant Profit and Loss (1988-92)*

	88/89	90/91	91/92
Revenues	60,000	39,600	19,800
Gross Profit	30,000	8,100	1,800
Expenses	15,000	15,000	15,000
Net Profit (Loss)	1 5,000	(6,900)	(13.200)

* Estimates in Table 2 are based on information obtained through interview with William Angalik on three years

Reasons For Failure

Poor Proponent: A number of respondents said William was a poor choice for owning and operating the fish plant since he already had a full time job in the community as a classroom teacher and was not as motivated as someone else who had no other source of income. They also said this was true of the husband and wife team that attempted to operate the fish plant in 1993 - where the husband already had a full time job as a Renewable Resource Officer, therefore had other job commitments to consider besides already having another source of income. Thus they said the project should have been tendered to confirm who else in the community **would** have been interested in operating the fish plant - preferably someone without a full time job and more motivation to make the business a success.

Poor Management: Without exception, respondents said poor management on the part of William was a main reason for the fish plant's lack of success. Numerous examples of William's poor management were cited,

William should have opened the fish plant July 1, instead of late into July, as was his practice, They felt if he had opened the plant earlier he would have been able to purchase higher volumes of fish product, since fishermen would have been encouraged to start commercial fishing sooner, William, however, continued to open only late into the season.

William often paid fishermen a poor price, For example, the local Northern Store manager said that at one time William paid local fishermen only $1.50 per lb. for arctic char when the Northern Store paid fishermen $1.75 per lb, for arctic char.

William occasionally gave checks to fishermen that bounced, which led to general distrust and reluctance to sell him any fish product whatsoever.

In 1990, when the community freezer failed, William left 5,000 lbs. of arctic char to spoil without attempting to remove the fish to other freezers.

William often did not pay creditors on a timely basis including the airlines, Power Corp and insurance company.

William could have marketed much more aggressively by contacting the hospital, restaurants and hotel in Churchill on a regular basis, and possibly holding fish in the community freezer for resale in November and December when arctic char was not available and higher prices could be obtained - up to $3.00 per lb. - in the community.

William was generally poorly organized and failed to keep proper financial records even though the local EDO worked very closely with him and encouraged him to improve his bookkeeping. Instead, William's practice was to work on a cash basis with a minimum of paper work, maintaining a general distrust of anything 'financial'. This practice made it very difficult for William to really know what was happening in his business until it was too late to take corrective action.

Low Fish Quotas: Regardless of William's apparently poor management, there was also a

serious limitation on the volume of arctic char that William could purchase. The Renewable Resource Officer said although there were about 57,000 lbs. of arctic char quotas available most local fishermen tended to commercially fish only quotas close to the community and leave the furthest quotas to those with bigger boats. This meant that the largest quota of arctic char (30,000 lbs. on the Ferguson River) was generally not fished, and in real terms the fish plant could probably draw upon only 27,000 lbs. of arctic char in a season. Moreover, two local non-native fishermen in the community, the Northern Store manager and the owner/operator of a bed and breakfast, did not sell their product harvest to William, preferring instead to sell directly to customers in Churchill for higher prices. Since, the two fishermen accounted for a relatively high volume of arctic char (about 10,000 lbs. in 1991) William had in real terms very low volumes of fish to draw upon,

Scale of Operation: Given the relatively low fish volumes that William's fish plant could realistically draw upon, and the trend for the two local non-native fishermen to sell arctic char directly to Churchill, it is questionable whether William could ever have earned sufficient revenues to cover plant overheads let alone earn a small profit. It is worth repeating that when William operated as a fish buyer, without the new fish plant, he was successful, earning a small profit to make it worth his expenditure of time. effort and money.

In light of the above, some respondents felt that William should have started a meat processing operation to generate additional revenues to cover some of the high operating costs, and indeed William was encouraged to go so far as to attend a four-day meat cutting course offered in the region. Much like the fish plant however, the meat plant also had limitations. There were only 100 commercially available caribou tags, thus limiting the overall volume of meat that could ever be processed in the meat plant. Moreover, William felt it was not Inuit custom to buy caribou and most people could easily get caribou free from local hunters, thus there was a very limited local market for caribou meat. The meat plant would also be in competition with the DevCorp owned meat plant in Rankin Inlet, Finally, William felt he would have to invest considerable money to meet health standards and with the low potential meat revenues, investing in a

meat plant was simply not a good idea, especially given the difficulties he was already experiencing with the operation, Why would he want more trouble?

Local Involvement

There was general agreement that local involvement in the fish plant was considerable It was a local group of fishermen who promoted the idea of establishing a fish plant and it was a local person (William) who became a fish buyer and then expanded into being the owner/operator of a larger fish plant. It was also William who made most of the day-to-day business decisions - what to pay local fishermen, where to market fish, who to hire as causal employees, and which creditors to pay and which creditors not to pay. William was also involved in designing the new plant and ordering equipment and supplies for the new facility.

Government involvement throughout the project was more one of support This was particularly the case with the on-going business management advice provided by the local EDO, who by all accounts devoted considerable time and effort in helping William deal with his daily business problems, The local EDO was also critical in developing William's business plan, arranging financing, and helping William to sort out his financial records when called upon.

There are only two areas where government involvement was questionable - although in hindsight, well meaning at the time. The first involves the decision to encourage William to purchase a new fish plant without due regard to the low levels of fish volumes that would in all likelihood be processed. Quite simply it did not make much sense to purchase a new fish plant when only 20,000 to 30,000 lbs. of arctic char would ever be processed - especially given the higher operating costs involved with a new plant.

Secondly, the DevCorp decision to bring in a new manager to replace William was apparently made without William being properly informed and could have been taken

with more sensitivity to the local situation - for example, someone from the DevCorp could have visited William to discuss the different alternatives available instead of letting him know by phone.

Conclusion

The Arviat Fishery is at best a marginal fishery with just enough fish quotas to earn a small income for local fishermen and possibly a local fish buyer, but not enough to justify the investment of a $180,000 fish plant with high operating costs. In hindsight the decision to purchase a new fish plant was therefore a poor decision and William Angalik should not have been encouraged to purchase the fish plant - unless government was fully prepared to underwrite the higher operating costs. Instead, William should have been left to operate as a fish buyer from a small shack and encouraged to sell fish product to Churchill - assuming DFO would have allowed this - and/or freeze fish in the community freezer for resale in November and December when local demand was strong and higher prices could be obtained. Or he could have not been encouraged to proceed with the project. Compounding these difficulties was the selection of a poor proponent and poor management in the fish plant. Local involvement throughout the course of the project was strong, although recently communication between the proponent and the DevCorp could have been more effective,

Pangnirtung Fisheries Ltd.

Overview

In contrast to most Arctic settlements, Pangnirtung has become accustomed to having some sort of commercial industry as its economic base for more than a century. There is the community's long and colorful history of resource exploitation in Cumberland Sound, starting in the 1840s with the commercial harvesting of bowhead whales. American and Scottish whalers relied upon Inuit labour and traditional knowledge until the once bountiful bowhead population was virtually depleted around the turn of the century.

Pangnirtung then focused its efforts on the commercial hunt of beluga and narwhal, until market demand for those marine by-products dried up. In its place, the traditional pursuit of seals turned into a commercial venture. The hunters fetched hefty prices for sealskins, keeping the community's standard of living relatively high until the early 1980s when animal rights campaigns caused the sealskin market to crash,

Forced once again to look for economic alternatives, Pangnirtung fishermen said it was their idea to fish turbot. Elder Peterosie Karpik said he approached the Department of Economic Development and Tourism with the idea of a test turbot fishery in 1985 Others interviewed were fuzzy on who initiated the idea, but most believed it was a joint effort between government and fishermen. Inuit hunters said they have always known there were turbot in Cumberland Sound - since the flat fish would surface near seal breathing holes and it was not uncommon to find the fish dead on the ice in the spring - but they had never known how to fish the deep-water species, With the help of government funds, Greenland fishermen came to Cumberland Sound in 1986 to train local people how to fish turbot with long lines.

The Greenlanders were most impressed with the test fishery results and it is said that their enthusiasm infected even the most skeptical local fishermen, Motivation levels were high

and fishermen were eager to participate in future efforts to establish a successful commercial fishery, The handful of local fishermen trained that year by Greenlanders acquired the skills quickly and were able to train new fishermen in the community in the following season. This sharing of ideas and technology between aboriginal peoples from different circumpolar nations is relatively new, but it is a popular practice among the people involved, and one that has obvious advantages over the traditional practice of importing southerners to train local people in methods which can be less suitable to northern climates and cultures.

During the successful early stage of the fishery, the Hunters and Trappers Association, representing the fishermen, and the local Economic Development Officer were the main proponents. The fishermen said even at this early stage of development they had little real input into decision-making and that government "called the shots". Government officials interviewed, however, said there was a free-flowing exchange of ideas between the local EDO, the hamlet council, the Co-op, HTA and P& L scallop fishery through attendance of all stakeholders at government held meetings and by virtue of the fact that in a small town, if someone had a problem, they would simply call or visit the local EDO at the EDO's home or office.

Still, government officials conceded they had great influence over decision-making since most local people had only a basic understanding of business "and beyond that, expect government to provide them with ideas and support, " This became most abundantly clear during the second stage of the fishery when commercial fishing began and a private, limited company was formed,

In 1988, Economic Development, through sponsorship by the local HTA, began selling fish commercially to southern Canada. A former EDO in the community described the year as a "strong partnership" between the two bodies, with the HTA still having final say in the fishery, but fed ideas and options from the Department, which now included regional staff in Iqaluit, as well as the local EDO.

Based on the success of the 1988 season, and knowing that it would be expedient to

privatize the fishery in such a way that it was implicit the fishery represented the community - thereby by-passing the need to access government funds through the HTA - Economic Development called a public meeting to discuss the future of the fishery. By all accounts there was little discussion about options, such as operating as a co-operative or a joint venture. The Department wanted the fishery to become a limited company and suggested that the three main power brokers within the community - P & L, the Co-op and the HTA - each be offered 20 per cent of the shares, with the rest of the shares made available to individuals, and a company be formed.

The community readily agreed to this idea and Cumberland Sound Fisheries Ltd. was formed.

"It was like, 'Here it is, you can do this, this is how it will be set up.' It seemed like it was a package deal," recalled a former board member from Pangnirtung. In hindsight, the Department regrets its decision to push for a profits-oriented, limited company. "There are shareholders who are not fishermen or directly involved so they have no meaningful relationship with the company and therefore it was hard to get solidarity among shareholders and *a raison d'être*," said one superintendent, adding, "I would have tried to limit it to people active in the fishery, in a sense a workers' co-op, although co-ops have a jaded image. "

Nonetheless, the people of Pangnirtung said they enjoyed the shareholders arrangement with Cumberland Sound Fisheries and felt the 8-member elected board of directors afforded them ample control and a direct stake in the company. In the beginning, the board was very active, meeting once or twice a week. "There was a lot of community decision-making at the time, there was a real sense of ownership, it was important," said a former board member. This was also an important period of hands-on learning for the board, which was still being advised by local and regional Economic Development employees.

While the HTA was represented on the board, individual fishermen still had no direct means to voice their concerns. The present chairman of the HTA recalled that some

fishermen would attend general shareholders meetings, but since they did not have shares, were not allowed to speak.

The Department hired a fishery development officer, who eventually assumed the role of plant manager, which was agreed to by the board. While the manager was well-liked his first year in 1989, tensions arose when the government suggested the manager did not have the proper administrative skills to run the plant and should be replaced with an imported, professional manager. At the community and the board's request, the government deferred the decision to replace the manager until the end of the 1990 fishing season when Cumberland Sound Fisheries Ltd. was at the brink of bankruptcy.

The board said it learned of the plant's financial problems only after the season had ended Board members then met with ED&T and jointly decided to accept a proposal to bring the Development Corporation (DevCorp) into the fishery in 1991. At first the Cumberland Sound board maintained controlling interest in the company, while the Development Corp hired a. professional manager who reported to the corporation. Economic Development had a hand in hiring the manager and stressed the importance of the education and training of board members as components of the manager's job, which was one of few attempts made to bring the necessary business skills to run a commercial fish operation under control of local people.

That year, however, the plant shut down early because it was losing money. In 1992 the DevCorp president called a general shareholder's meeting and offered them a new $3-million processing plant on condition the community lose controlling interest in the company. Since there were no objections at the meeting, Pangnirtung Fisheries Ltd, was formed to develop the new plant and operate the fishery.

Local Involvement

Virtually everyone involved locally with the fishery believes the agreement struck with the DevCorp will see them eventually regain control of the fishery when it becomes profitable

in an estimated five years, "Even though I'm not happy with the situation the way it is, 1 know in the future with the agreement they made that we'll run the fishery ourselves someday, " said one fisherman. The mayor is adamant that the loss of the 51 per cent controlling interest is temporary. While opinions are steadfast locally about future ownership, others are more skeptical, saying that a caveat requiring the fishery to be profitable before shares are returned to the community, is unrealistic. One former EDO said it is questionable whether any fisheries are profitable, given their high degree of subsidization worldwide.

For its part, the HTA is satisfied that with or without controlling interest, it has retained a large chunk of the decision-making power and in fact within recent years has increased its control over the fishery. For example, formerly the federal Department of Fisheries and Oceans distributed the 500 metric tonne turbot quota between the two prevailing companies in Pangnirtung. At the time, no one could receive a quota without first a written letter of approval from the HTA, which also decided who could get a fishing licence. As of this year, however, Fisheries and Oceans has given the HTA control of the quota. The chairman of the HTA said he and the board members have decided to let the fishermen catch as much fish as they want and sell it to whichever of the three current fisheries they want until the quota is met (It is widely assumed that should the HTA request a larger quota, it would be granted), This change could force the competing companies to boost their price for fish in hopes of attracting a larger proportion of the quota

In keeping with the Inuit tradition of consultation and harmony, the HTA has adopted a more community-minded approach to its fisheries operations by holding open public meetings whenever particularly important issues arise, The meetings are announced on the radio and posters are put up in town, Depending on the issue, the meetings are fairly well attended. One example was a meeting to decide whether to allow an exploratory fishery. The community was convinced, largely by the previous plant manager, that the dragging methods used by the exploratory vessel would irreversibly damage the ocean floor so the project was rejected.

Another example was the community's decision in December not to issue any quotas for scallop fishing in the coming season. Apparently hunters have complained that the bottom noise from dredging was disturbing the seals and forcing hunters to travel further distances from Pangnirtung. The Renewable Resource Officer in Pangnirtung believes the HTA has de facto total control over the fishery. "If this community decided at a public meeting that they didn't want a turbot fishery, it would be shut down, " he said.

The HTA president said these meetings are effective because all sides of the issue can be heard at one time. The HTA board has been troubled in the past by rumours and half-truths surrounding their decisions, so it has opted to play a more public decision-making role.

There is little doubt that there has been a drastic reduction in the level of local decision making from the inception days with Economic Development, through the formation of the Cumberland Sound Fisheries board of directors, to the present situation where Pangnirtung Fisheries Ltd.'s eight-member board is comprised of five members from the Development Corporation and three from the community. The chairman of that board, Johnny Mike, is the appointed member at large from the community. According to Mike, the DevCorp was asked to take over controlling interest "so they would be more than just a life support system, " and could give the company the necessary boost to see if it could become self-sufficient.

"We knew we had a marketing problem, facility problem, management problem, because of these things we decided that without the Development Corporation being involved, we wouldn't be around, " Mike said.

In order to acquiesce community concerns that too many decisions would be made in Yellowknife, Mike said a PFL management committee was struck to deal with the day-to-day operations and decisions of the plant. The HTA, Co-op, members at large and PFL all are represented on the management committee. Mike also said there were good communications between the management board and the current plant manager, who consults Mike sometimes on a daily basis. The plant manager started training his

potential replacement two years ago and Mike believes he takes direction more from local people than the PFL board.

Whatever the current workings of the board, it is clear that there is no where near as much local input as in the days when Cumberland Sound's board of directors was facing a flurry of tough decisions. Few people interviewed, including members of the PFL board, could name all of the people on the current board and locally, people were not sure who to take their concerns to.

The fishermen remain particularly disgruntled about their lack of leverage with the companies and have begun laying the groundwork for the formation of an association or union to represent their own interests - primarily the price of fish and the length of the season. Otherwise, fishermen said they are pleased with the development of the fishery and that it meets their expectations of providing employment and enough cash to assist them with household and hunting needs. Interestingly, the fishermen also noted that they have each become small business people and hope to pass their newly acquired knowledge on to other fishermen in Pangnirtung and in surrounding Baffin communities. Several local people interviewed expressed a desire to have the fishery improve the lives of Inuit throughout the region,

The fishermen echoed many people's sentiments that during the fishing season, people in the community are happier, busier and more productive. The fishermen said the fishery played an important role in reducing dependence on social assistance For unilingual, uneducated young people, it offers hope for employment and self-respect. Plant workers likewise are all local women who have quickly adapted to processing techniques and have become good, productive employees.

Conclusion

Participation by local people has played a large role in the fishery's success to date. There has never been a problem motivating people to work and the fishery has begun to attract

people from other Baffin communities. Apart from the fishermen, who ranked local participation at a medium level because they did not feel there was enough local decision-making, most everyone agreed that community participation was high and unprecedented in the Arctic,

As for ownership in the fisheries, most local people ranked it as low, but firmly believed that was only a temporary situation and would not have a negative effect upon the overall success of the fishery. The co-owners of P & L - a former scallop company which was granted a turbot quota in 1992- said they decided to go into competition with the new turbot fishery because they were unhappy with the arrangements made with the DevCorp Corp. “P & L thinks the project is too government oriented and that’s why they wanted to do their own fishery,” said a former Cumberland Sound Fisheries board member.

Economic Development officials, who said they are no longer consulted or involved in the fishery’s development, believed it is better for local people to make their own decisions and have a feeling that they are working for themselves and not government. While that was the government’s original intention, they said it became difficult to extricate themselves from the process “because in the end, you have to pay the bill s.” They added that they did not think the people of Pangnirtung fully appreciated the subtleties of losing control because they look mainly at the new investment as job security.

The implications of these changes will not be fully understood until the new plant opens in 1994 and has operated for a few seasons.

Clyde River Arctic Char Enhancement Program

Overview

In 1991 the community of Clyde River participated in an Arctic Char Enhancement Program to try to improve conditions for migration of Arctic char. The program was community-driven involving local people at all levels of the decision-making process - from inception to execution and follow-up. While it will not be known for perhaps another three years whether local efforts increased the fish count, elements of the program's success in educating, employing and involving the entire community in fisheries could be modeled in future development efforts.

Local Involvement

The Arctic Char Enhancement Program was borne in 1989 from a dissatisfaction within the community over the dwindling number of fish near Clyde River. Hunters could fish only during the winter months when they would sometimes travel up to 140 km one way by snowmobile to set their fish nets. The reason for the declining stock is unknown, but may be a natural occurrence, or the result of over-fishing and pollution. The fishermen brought their concerns to the local Renewable Resource Officer who began investigating the possibility of fish hatcheries.

Aaron Sekerak, an environmental consultant in Yellowknife, heard of the hatcheries discussions and began discussing other possibilities for enhancing the fish population with local members of the Hunters and Trappers Association and the Renewable Resource Officer, They all agreed to put in a proposal for financial support to have community discussions and to have Sekerak visit Clyde River and participate in the process.

With seed money from the Science Institute, Renewable Resources and Science Culture Canada, the process of community consultation and decision-making on fisheries

development began, This critical stage of development was thorough and illustrates the degree of interest and enthusiasm among Clyde River residents toward making an educated decision on the future of their fish resource. Through open meetings with the HTA and the community, the people of Clyde River explained the background of their problem and their desired goals to the consultant, who listened and made presentations with slides, pictures, diagrams and translations, on possible solutions. The people viewed five educational videos describing fish enhancement techniques and fish biology, with such titles as *Salmon Farming, River of Return* and *Birth of a Salmon.*

About 30 hunters and elders were surveyed with a questionnaire brought door-to-door by Clyde River residents to obtain information on local use of fish in the communities and possible ways to increase fish in specific areas. As well, a question and answer period was held on community radio to explain the purpose of the study and results of the int erviews. Sekerak said this forum was particularly useful in soliciting input from women in the community, who are generally restricted from attending meetings due to childcare.

The people decided for themselves that hatcheries were not feasible because of cost and their likelihood of breakdown and technical difficulties. Instead, they opted for a very practical effort to improve water flow in low-level streams to assist char in their migration to freshwater spawning areas. "They identified the problem and the need, and I said technologically and scientifically we can do that, " Sekerak said in an interview.

A petition was then circulated door-to-door which garnered overwhelming community support for fish enhancement studies. The detailed plan for specific activities was approved by the HTA in March 1991,

Finding finding for the entire effort was onerous at times, Sekerak said. Economic **Development and Tourism** refused **funding on the basis that the** project did not meet program guidelines. Environment Canada and the Department of Fisheries and Oceans also denied finds. Most of the work was financed through the federal Science Culture Canada, NWT Science Institute, Renewable Resources and even the consultant himself

Sekerak said in order to ensure all documents would be translated into Inuktitut, he included translation costs in his budgets when writing proposals for finding. As a result, the three resulting study reports are written in both languages, a first Sekerak believes, for scientific material in the NWT. This access for local people to the results and processes for the program has obvious benefits and similar efforts should be made to assist unilingual Inuks interested in resource management..

The HTA and the community at large identified six residents to join Sekerak in the actual stream improvement project in the summer of 1991. Using shovels and pry bars, the field workers dug out parts of the streambed and removed rocks and boulders at specific sites identified by scientific studies as being the best migration route. Three of the crew members were teenage high school dropouts who acquired their first job experience. "The community people were really pleased to see these young boys working and being given a chance," Sekerak said. Jamesee Qillaq, one of the hunters involved in the program, agreed, saying, "It (the program) helped a lot with the people. There's not too many jobs and it's good to try to learn something. "

The project area is a popular hunting ground for caribou and those people who were involved in clearing the migration route have since voluntarily acted as caretakers for the area, checking the stream to ensure that rocks have not blocked the passage again.

The third phase of the program was to study the number of char in the stream to determine if they were increasing in population. The Department of Indian and Northern Affairs contributed finds to this, along with the above mentioned groups. In the spring of 1992 four people, some with their families in tow, snowmobile to the site and were taught how to build simple traps out of 2 X 4's and wire mesh. The results of their three-week study showed the Arctic char population to be small, only 464 mature fish and 142 smelts (char migrating downstream for the first time in their life).

Sekerak recommended that similar counts be conducted each year for at least three years to provide the baseline data by which future counts can be compared. There was enough local expertise at this point for the people of Clyde River to conduct future studies on

their own, however that has not happened since nobody could secure the necessary funding.

"What I find extremely lacking in almost all the NWT when you talk about community interaction, is the people can identify their needs, but there's virtually no one who can deal with the government. They don't know how to get through the red tape, " said Sekerak. Given that many people from small settlements have limited English and education, "how can they write up a scientifically viable proposal?" he added. Qillaq had the same sentiments. "We started to learn how to do this, but that's the only hard thing because we don't have much education. "

In January of 1993, participants in the project joined Sekerak at two workshops held in Rankin Inlet and Iqaluit to share their experiences and knowledge in the area of population enhancement programs for fish. They were in each community for several days, offering ample opportunities and ways for people to attend. CBC radio had wide coverage of the events, along with CBC North television and the Inuit Broadcasting Corp. There were meetings with the HTA, general public meetings, meetings specifically with government employees, slide shows and full translation when needed. High profile Inuit leaders and bureaucrats attended and at each workshop the importance of community involvement *was* stressed.

The Rankin Inlet workshops were extremely successful. Iqaluit, due in part to its nature and size, was less attended.

Conclusion

In the Clyde River Arctic Char Enhancement Project, local involvement was necessary to project success, however government funding and outside expertise to access government finding, were equally important.