FISHERIES IN ATLANTIC CANADA AFTER THE COLLAPSE OF COD

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ABSTRACT

There has been great transition of fisheries in Atlantic Canada especially in Newfoundland these ten years, after the collapse of cod. The statistics of landing quantity, value, and number of fishers in Newfoundland & Labrador show that while landings and number of fishers have decreased by half, landed value has doubled. However, seeing only these rough figures, very important issue of how the real situation of industries and people's lives has been changed can easily missed. I will analyze influence of this drastic transition based on my research in Atlantic Canada, which includes interviews with fishers, processing companies and concerned individuals in St. Anthony, St. John's of Newfoundland and Ottawa. At the moment, there are 5 topics of real implications of the drastic transformation of these 10 years that needs to be examined. 1) Change in the species: The specie of caught fish has shifted from relatively cheaper groundfish to more expensive shellfish. 2) Differentiation in the classes of enterprises: Shellfish fishers dominate the upper class and fishers who catch several species with small boats belong to the lower class. 3) Growing processing companies' influence: The power of processing companies toward fishers has significantly increased. 4) Functional disorder of fishers' organizations: Organizations made before the collapse of cod have become unsuitable to the state. 5) Influence on communities: The change has had great influence on traditional communities which have been dependent on fisheries and processing industries.

Keywords: Fisheries, Atlantic Canada, Newfoundland, Shellfish, Community

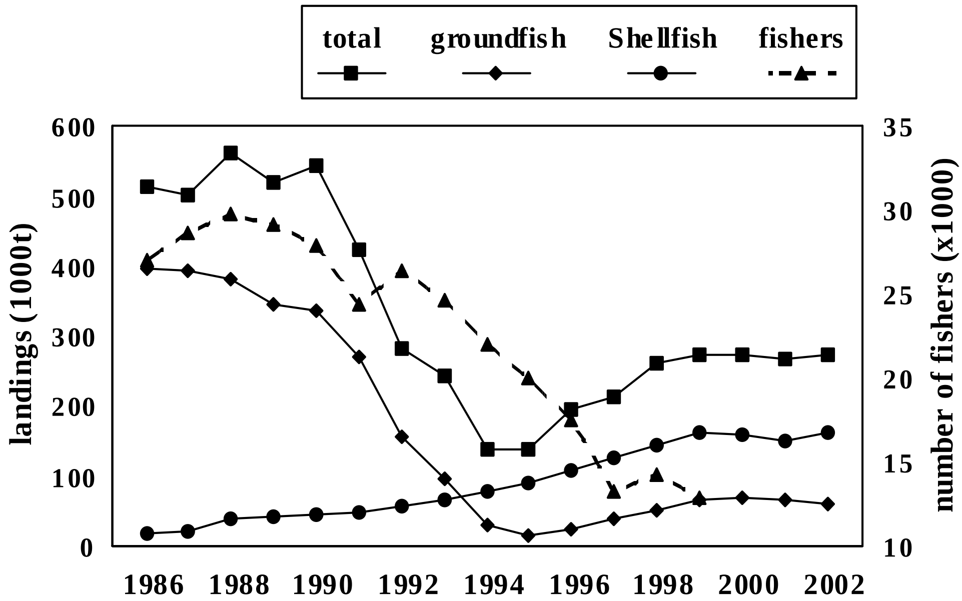
INTRODUCTION

Ten Years of Change

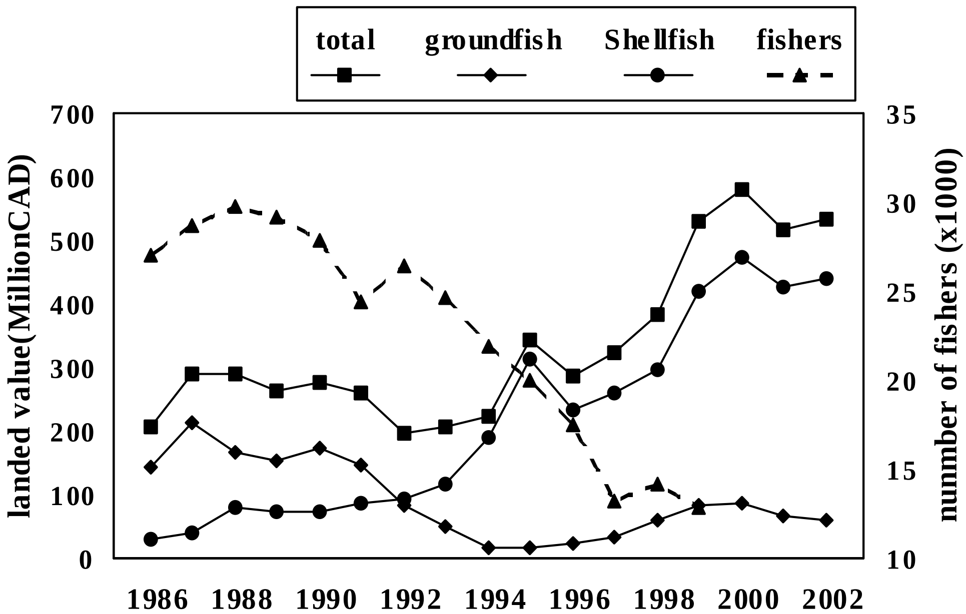
Fisheries in Atlantic Canada arrested great attention not only in Canada but also in the world when some groundfish, especially northern cod, had collapsed in the beginning of the 1990's. The influence of this groundfish collapse seemed to be most severe in the province of Newfoundland and Labrador. Over the next ten years there has been a great change of fisheries in this area.

These graphs show the statistics of landings, landed value, and number of fishers in Newfoundland & Labrador. While landings and number of fishers have decreased by half, landed value has doubled. So, by very simple statistical calculations, the landed value fisher became 4 times greater than before.

However, seeing only these rough figures, very important issue of how the real situation of industries and people's lives has been changed can easily missed. In other words, who has earned money and succeeded, or who has lost money and failed? Is the present situation economically and socially desirable?



Landings of Nowfoundland & Labrador



Landed Value of Newoundland & Labrador

Source: Website of Department of Fisheries and Oceans Canada

My research
I made 4 research trips to Atlantic Canada and Ottawa, in February of 1999, 2001, 2002, and August to September of 2002. During my staying in Canada, I interviewed with fishers and processors in St. Anthony Newfoundland, Sept Iles and Blanc Sablon of Quebec, fisher's associations and a union in Newfoundland, Quebec, and Ottawa, associations of processing companies in Newfoundland and Ottawa, university scholars, and staffs of provincial and federal governments.

I think that it is impossible to truly evaluate the change or state without understanding the real behaviors and views of fishers and processors.

This is example questions of my interviews. By asking wide range of questions, I am able to gather information on not only fisheries but also the social status behavior, and lives of the fishers.

Table1 Examples of Questions

General	Age, Kind of Fisheries, Species of Target Fish, Size & Number of Vessels, Fisheries Schedule, Landings
Personal History as a Fisher	When Started Fishery as his Job, Reason to choose fishery, How and from Whom Get Licenses
Selling	Where to Sell Caught fish How to Decide Prices, Relationship between fishers and Processors
Life	Income, Experience of a Crew and/or other jobs, Finance for building vessels, When Retire from Fishery, Dealing with Licenses and Quotas when Retirement
Family	Family structure, Family Members Jobs
Society	Relationship with Other Fishers, Fishers' organization
Others	Demand to Governments, Problems and Expectation for the Future

Outline of Fisheries of Atlantic Canada

Before discussing my research, I would like to review the characteristics of fisheries of Atlantic Canada.

1) Importance of fisheries
Landings of 2002 was 870 thousand metric tons and landed value was about 14 billion US dollars. Half of the landings are from coastal fisheries, which are only operated by self-employed enterprises, and not companies. Almost all the fishers of self-employed fishers succeeded their fathers' and grandfathers' before them.
Fishery industry and seafood processing industry have been important in economical and social sense in the northeast part of Newfoundland and other some places in Atlantic Canada, because they have supported the base of the communities by providing employment and income, where there rarely had been any other industries beside them.
2) Importance of Processing Industries
We cannot ignore processing industries when considering about fishery in Canada because most of landed fish are processed for export. Processing industry provides as much employment and incomes as fishery industry, and it is also important for the rural areas mentioned before.
3) Jurisdictional Problems
However, jurisdictions over these industries are divided between to Federal and Provincial governments. Marine fisheries are managed by the Federal government while processing industries are licensed by the Provincial government. This division sometimes causes contradiction or inconsistency amongst the policies.
4) Fishery Management
Fisheries in Canada are managed by TAC with ITQ or IQ and licenses. Those who are engaged in fisheries need to get licenses from the Federal government, and the licenses regulate the type of fisheries, or, the exact species of fish, fishing gear, size of vessels and fishing ground. TACs are decided by Minister of Fisheries and Oceans of the Federal government every year. TACs are divided equally to concerned license holders which are ITQs of the year. Though licenses are legally nontransferable, in actuality, fishers buy and sell their licenses.

Five topics

At the moment, there are 5 topics of real implications of the drastic transformation of these 10 years that needs to be examined. Further research is required to analyze them more clearly.
1) Change in the species: The specie of caught fish has shifted from relatively cheaper groundfish to more expensive shellfish.
2) Differentiation in the classes of enterprises: Shellfish fishers dominate the upper class and fishers who catch several species with small boats belong to the lower class.
3) Growing processing companies' influence: The power of processing companies toward fishers has significantly increased.
4) Functional disorder of fishers' organizations: Organizations made before the collapse of cod have become unsuitable to the state.
5) Influence on communities: The change has had great influence on traditional communities which have been dependent on fisheries and processing industries.

EXAMINATION OF THE TOPICS

St. Anthony Area

On this presentation, I will detail these 5 topics based mainly on my interviews with fishers in St. Anthony Newfoundland.
St. Anthony area consists of St. Anthony City and 5 communities, whose population is approximately 25

thousand. Major industries are fishery, processing industry, mainly shrimp processing, and turism. During winter when all of these industries are off season, unemployment rate rises to 60%.

Change in the Species

After the collapse of cod in the beginning of the 1990s, fisheries shifted their primary target from groundfish to shellfish. Unit prices of shellfish is more expensive than groundfish, which is a reason why landed value has doubled while landed volume has been reduced by half.
When comparing landings of major species of Newfoundland between 1990 and 2000, shrimp and queen crab have been markedly increased. Also in St. Anthony, landings of queen crab has increased while that of cod has decreased.
At the time when the Federal government started a moratorium of cod fishery, it adopted a policy to the promote retirement of the fishers. I suspected that the purpose of the government policy in the first half of the 1990s was to wait for a recovery of groundfish resources with the fishery moratorium while at the same time reduces over capacity.

However, as the landings of shellfish increased during the 1990s, the situation has taken a new turn. Although it is obvious that the shift from groundfish to shellfish did occur, the reason is not distinct. Someone believes that larva of shellfish, especially shrimp; survive more than before because the population of its predator, cod, had diminished. Others say that shellfish, especially crab, have inhabited for a long time but fishers were rarely interested in them.

Table2 indicates the landed volume and number of licenses. Comparing those of 1990 and 2000, there are interesting differences between shrimp and crab.
As for groundfish, both landings and number of licenses have decreased, which is a result of resource situation and the governmental policy to promote retirement of the fisheries.

Table 2 Landings and Number of Licenses of Newfoundland

		1990 (a)	2000 (b)	(b)/(a)
groundfish	landings	336,588	37,822	0.20
	license	9,506	5,039	0.51
shrimp	landings	19,998	84,065	4.20
	license	56	420	7.50
crab	landings	11,054	55,581	5.03
	license	712	779	1.09

In regards to shrimp, the number of licenses increased up to 7.5 times as before, and landings also increased by 4.2 times during the 10 years. This table shows that this fishery is newly developed and licenses have been issued at a quick pace. So shrimp fishers are the new comers.

On the contrary, the number of licenses for crab fishery is stable while landed volume has increased by 5 times as before. According to my research in Atlantic Canada, 'Crab Fishermen' are symbols of 'Successful Fishermen' who have appeared after the collapse of cod. They are ones who already had a crab licenses before the collapse of the cod or bought licenses from other fishers. In order to know the state of fisheries in Atlantic Canada after the collapse of cod, an effective way is to analyze crab fishers' behavior and personal histories of those who played the leading part during the drastically changing decade, for example, to understand when and how they got licenses and start crab fishery.

Differentiation in the classes of enterprises

I interviewed with 7 fishers in St. Anthony. Table 3 indicates characteristics of each of them. Fishers A, B and C represent the rich people in this area and their main job is crab and shrimp fisheries. Fishers E, F, and G are fishing various species depending on the seasons besides crab. Fisher D is situated in the middle of them, and runs the smallest business the among crab fishers. He has just received new license for shrimp fishery and is now making new vessels of 35 feet. I am very interested in the future of his enterprise to see if he will join to upper class fishers or not.

Table 3 Characteristics 7 Fishers

	age	Kind of Fisheries	Gross Income (1000 USD)
A	64	Crab & Shrimp Mainly Cod and Greenland Halibut	450 – 525 / year (1000 in the past)
B	52	Crab Mainly + Shrimp Greenland Halibut	No Answer Looks Rich
C	55	Crab & Shrimp	No Answer
D	41	Crab Mainly Lumpfish, Cod (Research Fishery)	23 / year Increased
E	42 35	Snow Crab and Toad Crab, Lumpfish, Cod, Whelk, Mackerel, Seal	No Answer
F	45	Snow Crab, Whelk, Mackerel, Lumpfish	Same as before
G	61	Snow Crab, Mackerel	Increased

It should be noted that fishers who participated in the interviews are considered to be somewhat generally well off. Those in difficult situations usually don't want to talk about their business or their lives. I conducted interviews with fishers by being introduced by the persons concerned with a processing company in St. Anthony. Although they understood the intention of my research and tried to ensure that I could talk with various fishers, fishers were not selected at random. This must be kept in mind when considering the results of my interviews.

The change of these ten years can be summarized by the following, based on my direct interviews with fishers and concerned individuals. Fishers who were engaged in groundfish fishery with very low income left their self-employed businesses. They have either gone to other areas outside of Newfoundland or are working as crew members of other enterprises.

In regards to crab, almost all the upper class crab fishers of today started their crab fishery as side business in the beginning of 1990s. However, in those days the price of crab was lower than today. I heard price of crab per kg rose from 60 cents to 3dollars and 50cents. Crab fishery did not become attractive for them until the collapse of cod. In the past, the difference among self-employed fishers was not so clear, because almost all of them were mainly engaged in groundfish fishery.

During 1990's, however, differentiation in the classes of fishers occurred as a result of the collapse of cod, rising price of crab, and development of shrimp fishery. In other words, shellfish fishers who operate crab and shrimp fisheries dominate upper class and the fishers who are engaged in fishing crab, groundfish and other species dependent on the seasons in their smaller boats belong to lower class.

Growing processing companies' influence

In Newfoundland, prices are decided by species through negotiations between the Fishermen's Union and the Processors Association in the middle of February before the start of the fishing season. Fishers then sell their caught fish individually to Processing Companies based on the pre-negotiated prices.

In 2001, shrimp processors decided to close their factories in order to maintain the prices of their product, which caused conflict between shrimp fishers and processors. In 2002, as a result of the negotiation, shrimp prices during summer went down to a low level. This meant the actual closure of shrimp fishery during the summer.

In this connection, negotiated prices are actually bottom prices and upper class fishers sell their caught fisher at higher prices. This is because they invest in equipments to keep the quality of caught fish or they spend more time than others in negotiating individually with processing companies.

Another example of problems between fishers and processing companies is about finance. When the moratorium of cod fishery was started by the federal government, Newfoundland provincial government decided to end its loaning program for fishers. They say that instead of the provincial government, processing companies got to take part in fishers finance. Fishers are financed by companies to make new vessels with promise to sell their caught fisher to them. Exact status is unclear but fishers and governmental person told me that many fishers, possibly as many as over half of them are in someway financed by processing companies.

Functional disorder of fishers' organizations

Most of fishes of Newfoundland and Labrador are covered under the Fish, Food and Allied Workers' Union that manages all over the province. Representatives from St. Anthony city and each community are selected and attend meetings held at the provincial level. Meetings regarding St. Anthony area are also held several times per year, but there is no permanent office.

Fishers responded that the most important role of the union is to negotiate pricing with the association of processing companies, while it also negotiates with governments about fishery management and so on. They recognized its services in setting prices but some said that it cannot unify their opinions because various fishers belong to the same union and their interests are more diverse than before.

Fishers' organizations of Atlantic Canada were formed before the collapse of cod and their structure is a reflection of the conflicts of those days, For example, associations in Quebec are divided between the ones for fixed gear and ones for mobile gear. This situation is unsuitable for the status quo. Today's mainly conflicts occur between shellfish fishers and others.

Influence on communities

The change has had great influence on traditional communities which were dependent on fisheries and processing industries. Each fisher I interviewed with lived in different communities. They told me that self-employed fishers in their community have decreased considerably. When I walked around the town, I had the impression there were few young people. It is more difficult for elder fishers to find different jobs, and more young people leave for other places and to other industries. At the same time, depopulation and aging of communities continues. The population of St. Anthony has decreased to by half over these ten years.

Also there is possibility that the sense of identity as a community will fade out as differentiation in the classes of fishers expands. There are always conflicts between fishers at anytime, anywhere in the world, but opposition between upper and lower classes has different implications than competition among similar fishers.

CONCLUSION

My presentation concludes by explaining the change in fisher's attitude toward their jobs and other fishers.

The richest fisher in St. Anthony told me that he was mainly engaged in groundfish fishery mainly with crab fishery as a side job before 1990. He was also engaged in scallop fishery for a while, but now carries on shrimp and crab fisheries. He is a typical successful fisher during the great transition in Atlantic Canada after the collapse of cod.

As seen at the point of characteristics of a fisher, fishers A, B, and C and fishers D, E, F, and G are very different. Fisher A, B, and C are upper class shellfish fishers who are no longer occupied in jobs on the sea but work entirely on land. This kind of fisher is called "slipper skippers" and is a businessman rather than a fisherman. They devote themselves to managing their business or negotiating with processing companies. They do not socialize themselves with other fishers as friends.

On the contrary, fisher D, E, F, and G are working on the sea as traditional fishermen. They frequently communicate amongst themselves, exchanging information about their fisheries in town, at the port and on their vessels.

Table 4 Attitude toward Jobs and Other Fishers

	age	Kind of Fisheries	Jobs on the Sea	Communication With Others
A	64	Crab & Shrimp Groundfish	NO Slipper Skipper	2 or 3 Meetings per year
B	52	Crab + Shrimp Groundfish	NO Slipper Skipper	NO
C	55	Crab & Shrimp	NO Slipper Skipper	
D	41	Crab Mainly Lumpfish, Cod	YES	YES
E	42 35	Multi-Species	YES	Whenever Meet Others
F	45	Multi-Species	YES	Frequently
G	61	Multi-Species	YES	Help Each Other on Land and the Sea

. The fisheries in Atlantic Canada are still in the middle of transition. Fishers separated into two classes may remain in the area and possibly change into different type of fishers, or fisheries may be more and more concentrated to the upper class. And there are other possibilities. I am very interested in the future of fisheries in this area and would like to continue my research on the consequence of this great change caused by the collapse of cod

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ENDNOTES

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