

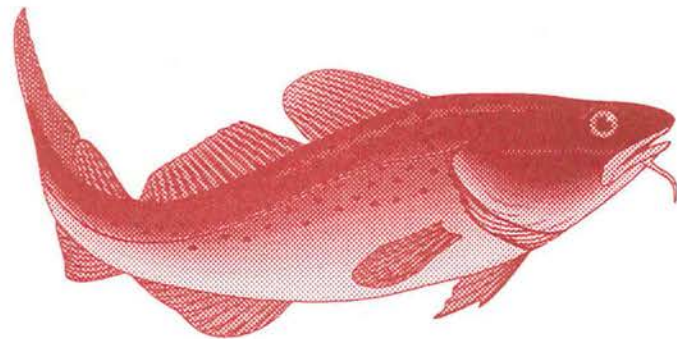


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The Atlantic Groundfish Fishery: ITS FUTURE



Report of the Standing
Senate Committee on Fisheries

First Session, Thirty-Fifth Parliament

December 1995

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Membership of the Committee

The Honourable Eileen Rossiter, *Chair*
The Honourable L. Norbert Thériault, *Deputy Chairman*

and

The Honourable Senators:

Comeau
De Bané
Doody
*Fairbairn (or Molgat)
Gigantès
Jessiman
Kirby
*Lynch-Staunton (or Berntson)
Meighen
Petten
Robertson
Twinn

**Ex Officio Members*

The following Senators also served on the Committee during the study of the Atlantic Groundfishery: The Honourable Senators Adams and Bonnell.

Orders of Reference

Extract from the Minutes of Proceedings of the Senate, Thursday, April 28, 1994:

The Honourable Senator Rossiter moved, seconded by the Honourable Senator Cochrane:

That the Standing Senate Committee on Fisheries be authorized to examine and report upon the Annual Report of the Department of Fisheries and Oceans for the fiscal year ending 31st March, 1991, tabled in the Senate on 23rd March, 1993, and other matters relating to the fishing industry; and

That the Committee present its final report to the Senate no later than 29th June, 1995.

After debate,

The question being put on the motion, it was adopted.

The Clerk of the Senate

Paul C. Bélisle

Extract from the Minutes of Proceedings of the Senate, Monday, June 5, 1995:

The Honourable Senator Rossiter moved, seconded by the Honourable Senator DeWare:

That the Standing Senate Committee on Fisheries which was authorized by the Senate on April 28, 1994, to examine and report upon the Annual Report of the Department of Fisheries and Oceans for the fiscal year ending 31st March, 1991..., and other matters relating to the fishing industry; respectfully requests that the date of presenting its final report be extended from June 29, 1995 to no later than December 20, 1995.

The question being put on the motion, it was adopted.

The Clerk of the Senate

Paul C. Bélisle

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PREFACE

The Atlantic groundfish fishery faces agonizing changes, the likes of which we have never seen. The importance of groundfish to the region would be hard to exaggerate. Circumstances like these stir up strong regional emotions, and understandably so since, for generations, fishing has been the economic and social foundation of the East Coast. The situation in the Province of Newfoundland and Labrador is especially tragic because of the province's greater dependence on the industry. Calling the crisis the country's largest single layoff hardly describes the visceral nature of the devastation.

For many, the tragedy developed over a long period of time and under successive federal and provincial governments -- some would say it began as early as 1977 when Canada extended its jurisdiction to 200 miles.

In December 1989, the Standing Senate Committee on Fisheries tabled a report which largely reflected the concerns and ideas brought forward at public hearings held in cities and towns throughout the five Atlantic provinces in 1988. At that time, groups and individuals repeatedly warned the Committee that the Atlantic fishery was at a cross-roads, and that, unless fisheries management issues were addressed more comprehensively, the industry would soon have fewer or no fish to market. In June 1993, we submitted a report on Canada's Atlantic commercial inshore fishery which, in many respects, was very much a continuation of our 1988-89 study. Among other things, the Committee recommended that a Royal Commission be appointed by the federal government to advise on how the groundfish fishery should be managed.

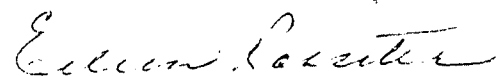
Fishery closures are now in effect on some 11 groundfish stocks, and severe restrictions have been placed on fishing other stocks. The rebuilding of the resource has yet to begin; scientific assessments for 1995 reveal little sign of improvement. Northern cod, once the North Atlantic's largest cod stock, has continued to decline despite the moratorium in place since July 1992. The Department of Fisheries and Oceans (the DFO) suggests that it could take as long as 14 years for the stock to recover and for a diminished fishery to return. The reasons for the collapse of the resource are not well understood. A number of factors may have come together to put the stocks in the very precarious situation they are in today.

The DFO intends to reduce *harvesting capacity* by half. The Atlantic fishing industry is therefore on the threshold of profound and unprecedented structural transformation. Compounding current problems is the fact that the fisheries management budget of the federal department will be reduced over the next few years. The fiscal realities for both the federal and provincial governments will certainly influence the direction of the fishery in the years ahead.

The will to make the necessary adjustments is there; however, the industry does not appear as yet to have a common vision for the future, as can be seen by the recent reports of various industry sectors. The Fisheries Council of Canada (an organization representing processors, distributors and exporters), for example, is promoting privatization of the fishery, while the Canadian Council of Professional Fish Harvesters, formed in April 1995 and reportedly representing 80-90% of the country's recognized fishing organizations, espouses the concept of common property in the fishery.

It is now recognized that the resources of the sea are not infinite or inexhaustible, as was once imagined. Building a renewed industry that will be both ecologically and commercially sustainable will require tough and rational decisions about its structure, and giving priority to the proper use of technology and to sound resource management and conservation practices -- now commonly termed "a new conservation ethic." Stock rebuilding runs the risk of being short lived if fishing effort is not matched to resource abundance. To paraphrase the Senate Committee's conclusion in December 1989: in the absence of comprehensive knowledge and in the face of uncertainty, fisheries managers and policy-makers should err on the side of conservation and caution.

This is an opportune time for the Committee to review some of the more perplexing and salient issues facing the industry. We hope our suggestions are constructive.



Senator Eileen Rossiter
Chair

THE ATLANTIC GROUND FISH FISHERY: ITS FUTURE

MISCONCEPTIONS ABOUT THE ATLANTIC FISHING INDUSTRY

The commercial marine fishery on the East Coast comprises diverse sea fisheries and fishing grounds in the Gulf of St. Lawrence and within Canada's 200-mile zone, from Davis Strait in the north to Georges Bank in the south (Chart 1).⁽¹⁾ The principal types of fish are groundfish (so-called because they generally feed and dwell near the ocean bottom), pelagics (species which range throughout the water column and feed in surface and middle-depth waters), and shellfish (crustaceans such as crabs and lobsters, and echinoderms such as sea urchins).

For generations, fishing has been the economic and social mainstay of some 1,300 small communities widely dispersed across the five eastern Atlantic provinces. Just prior to 1992 (the year a moratorium on commercial fishing for northern cod was imposed,⁽²⁾ the basic characteristics of the Atlantic industry were as follows:

- some 59,000 registered fishermen, 28,000 fishing vessels, and over 1,000 processing establishments employing upwards of 61,000 people in 1991;
- a multi-species harvest of groundfish (the main engine of jobs in the Atlantic region), shellfish and pelagic fish, producing a combined

(1) The waters off the Atlantic coast are divided into different sectors, according to an alphanumeric code. For example, the southern area of the Grand Bank includes divisions 3N and 3O, or simply 3NO. Fisheries statistics are usually gathered on the basis of these areas. In this document, words importing masculine gender include the feminine gender.

(2) The northern cod fishery had been for years the single most important fishery on Canada's East Coast, representing nearly half of total available cod quotas and a quarter of all groundfish quotas. In 1991, a year when the Total Allowable Catch was at its lowest in a decade, the fishery had an estimated value to the Canadian economy of over \$700 million, and supported directly and indirectly some 31,000 jobs in the region, 90% of which were based in Newfoundland and Labrador.

annual catch of 1.11 million tonnes in 1991 and generating a production value of about \$2.2 billion;

- groundfish accounting for half of total landings in 1991 and 42% of total value (with cod representing about 50% of total groundfish catches); and
- Nova Scotia and Newfoundland and Labrador being by far the predominant provinces in terms of the major indicators (e.g., number of fishermen, fishing vessels, fish plants, volume and value of catches).

(3)

Contrary to what many people believe today, the industry continues to make a very important contribution to the Canadian economy. The members of the Senate Committee on Fisheries share the concern voiced by Mr. Gilles Thériault, President of GTA Consultants Inc., that the Atlantic fishery is perceived as a "burden" on Canadians. The witness put it this way when he testified before the Senate Committee:

I think it is fair to say that the public's perception of fish has changed tremendously, but the perception of our fishery is still that of being a burden on the Canadian economy. I think this is a very serious problem. It is a misconception.⁽⁴⁾

On this, it was brought to the Committee's attention that a report released by the Fisheries Council of Canada (or FCC) had received much publicity in the media in October 1994 for having made the following statement in support of privatization of the industry:

The fishery does not generate resource rents - far from it. It does not even generate normal profits for most of its participants. More seriously, when all private and public costs are included, the fishing industry consistently represents a substantial net drain on the Canadian economy...In 1990 (before the resource downturn), the fishing industry cost the taxpayers of Canada about \$1 billion.⁽⁵⁾

(3) Department of Fisheries and Oceans, *Estimates, Expenditure Plan, Part III, 1993-94*, Supply and Services Canada, 1993, p 17. Marine plants (e.g. Irish moss and kelp) and other forms of marine life are also considered to be "fishery" resources.

(4) *Proceedings of the Standing Senate Committee on Fisheries*, Issue No. 4, p. 26.

(5) Fisheries Council of Canada, *Building a Fishery That Works: A Vision for the Atlantic Fisheries*, 1994, p. 18.

In response to the FCC report, an economic analysis prepared by the Canadian Council of Professional Harvesters (CCPH) disputed the Council's claim that the fishery was a drain on government finances. The study shows that, in 1990, the industry had actually contributed \$425 million to the government coffers. Adding the indirect and induced impacts to the direct impacts, the analysis demonstrates that not only do the fisheries generate almost 100,000 person years in jobs in the Atlantic provinces, they also create another 100,000 or so jobs outside the Atlantic region.

Mr. Thériault also pointed out that in 1993, the total landed value in the Atlantic fishery was about \$900 million, only 19% less than the historical peak recorded in 1987, and this despite the moratoria on fishing groundfish. In other words, there has been a tremendous growth in other, non-traditional fisheries since the late 1980s.⁽⁶⁾ Indeed, several groundfish fisheries are now largely supported by stocks and species (e.g., skate, monkfish, winter flounder) that were scorned or considered of minor importance prior to 1992. Officials of the DFO testified that, because of the limited resources available for scientific assessment and because less is known about the biology of the less "traditional" species, the Department is taking a very cautious and conservative approach in setting catch limits for these stocks.

As well, the harvesting of pelagic and invertebrate species has increased steadily in the last decade. Some activities, such as lobstering and fishing for crab, remain very successful and profitable, mainly because of good landings and high prices. One ecological irony is that groundfish, like cod, are natural predators of shellfish. Some may be surprised to learn that it is not unusual for crab fishermen in the Gulf of St. Lawrence to gross more than \$1 million a year (before boat and crew expenses). In short, there is far more to the Atlantic fishing industry than the groundfish crisis.

THE COLLAPSE OF ATLANTIC GROUND FISH

The current status for traditional stocks of Atlantic groundfish, however, is extremely bleak. Resource assessments for 1995⁽⁷⁾ show that the biomass⁽⁸⁾ for most stocks remain at or near

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- (6) In fact, the most recent statistics show that, in 1994, the value of landings in the Atlantic fishery (\$1.04 billion) was the second highest on record.
 - (7) Made public by the Science Branch of the Department of Fisheries and Oceans on 29 June 1995.
 - (8) The biomass is the total weight of a fish stock.

historical levels of scarcity, and that recruitment of young fish into the commercial fishery has been very poor. Despite severe restrictions on fishing, including moratoria on fishing 11 stocks, there is very little evidence of improvement. With the noteworthy exception of haddock off south-western Nova Scotia and in the Gulf of Maine area, and Gulf of St. Lawrence turbot, there are very few signs of abundant young fish.

Although recovery, if it occurs, will be slow and protracted, it may be faster in southern areas where environmental conditions are more favourable to higher productivity. For those cod, white hake and red-fish stocks where mortality has been reduced, it will take between five and ten years for year-classes to become mature, once they are created.⁽⁹⁾

In the waters off Newfoundland and Labrador, traditional commercial groundfish stocks continue to be at or very near their historical low levels. For northern cod, the Committee learned that a scientific survey in 1991 revealed that the stock had declined by about one half from the previous year, that it had further declined by two-thirds between 1991 and 1992, by three-quarters between 1992 and 1993, and by four-fifths between 1993 and 1994.

In fact, the prospect for northern cod has worsened since a moratorium on commercial fishing was imposed in July 1992, and there are no indications of an eventual recovery before well into the next century. This recovery will depend on fish that have yet to be hatched. In northern waters, where the magnitude of the devastation is most pronounced, cod typically take about seven years before they are able to reproduce at least once. According to the DFO, it is very unlikely that northern cod will be rebuilt in less than two generations, that is to say 14 years (taking us to the year 2009).

Although fishermen have reported the presence of northern cod in Newfoundland bays and coves (so-called "bay stocks") in 1995, and a DFO fisheries research vessel, using echo sounding surveys, confirmed that there were between 10,000 and 20,000 tonnes of spawning age cod in Trinity Bay in late April 1995, we were told that these positive signs do not necessarily indicate that the stock is rebuilding. The aggregation of fish is relatively small compared to the hundreds of thousands of tonnes of spawners believed to have been present as recently as 1990. Moreover, the fish

(9) Department of Fisheries and Oceans, *Overview of the Status of Canadian Managed Groundfish Stocks in the Gulf of St. Lawrence and in the Canadian Atlantic*, Atlantic Stock Assessment Secretariat, Science Branch, DFO Atlantic Fisheries Stock Status report 95/3E, June 1995, p.5.

seen this year were discovered inshore, and little historical scientific data are available on those sub-stocks.

In describing the historical context of the northern cod fishery to the Committee, Dr. William Doubleday, Director General of the Science Directorate of the DFO, explained that, although there were downturns in the resource during the 1890s and in the year 1713, these periods of scarcity were not as severe as that being experienced today.

Several theories are put forward to explain the unprecedented decline in Atlantic groundfish and all may contain an element of truth: it is therefore difficult to determine how to weigh one factor against another. According to Dr. Doubleday, the depletion appears to be part of a general phenomenon in the North Atlantic Ocean. More specifically, ecological factors, such as extremely cold water, may have increased the mortality rate of young fish entering the fishery (poor recruitment) and caused a steady decline in the growth rate ("weight-at-age") of groundfish.⁽¹⁰⁾ Colder water is believed to have led to similar declines in cod populations off Greenland and Iceland before the modern era, when fishing was not suspected as a major factor. Dr. Doubleday reported that populations of small pelagic fish (e.g., herring), on the other hand, were more volatile than those of groundfish and more vulnerable to sudden disappearance because of heavy fishing. East Coast herring stocks, for instance, were decimated in the late 1960s by purse seiners.

The Committee was told that cod from the natural environment in the spring have been found to be in a condition similar to that of fish subjected to starvation under severe conditions in the laboratory. In other words, there appear to be factors at play other than overfishing. However, Dr. Doubleday also testified that there is no real consensus within the scientific community on whether changes in the environment caused the collapse of groundfish. If ecological factors are accepted as the major reason, their effect was said to have probably been greatest in north-eastern waters off Newfoundland and least in the south-west off Nova Scotia.

The so-called "cold water theory" is dismissed by those who believe that overly optimistic harvesting levels, certain fishing technologies and practices are the root causes of the collapse in groundfish.⁽¹¹⁾ Specifically, spokespersons from the inshore are convinced that offshore

(10) For some cod stocks, a seven-year-old fish now weighs only a half to two-thirds what a fish of the same age weighed ten years ago.

(11) The Standing Senate Committee on Fisheries, in its December 1989 report, deplored the practice of discarding, dumping, and harvesting small fish -- the extent of which was not well-documented at the time -- and cautioned that unless a greater proportion of groundfish were allowed to reproduce before being caught, the industry would soon destroy the resource. The Committee also reported that the Atlantic industry had

trawlers, equipped with up-to-date fishing gear and technologically sophisticated means of locating concentrations of fish, are mainly responsible⁽¹²⁾. They also criticize the federal Department for ignoring, for successive years in the mid-1980s and early 1990s, not only the repeated warnings of coastal fishermen (especially the fixed-gear sector) that stocks were declining and that the fish were getting smaller, but also, the advice of its own scientists with respect to northern cod.⁽¹³⁾

In regard to fish stock assessments, several reasons are usually given to explain their past unreliability. These can be summarized as follows:

- The flawed models used by scientists to predict the supply of stocks;⁽¹⁴⁾
- The failure of the Northwest Atlantic Fisheries Organization (NAFO) to control the fishery for groundfish stocks that straddle the 200-mile limit;
- The misreporting of catches by the Canadian fleet;⁽¹⁵⁾ and

been slow in changing from a traditional volume orientation (i.e., fishing whatever could be caught and then trying to sell it) to a "market-driven" approach that took into account the needs of specific market segments as well as availability of resource.

- (12) An important feature of Canada's Atlantic fishing industry is the distinction between the "inshore" and "offshore" sectors. For fisheries management purposes (e.g., licensing, quotas, vessel replacement), the "inshore" sector includes all vessels less than 65 feet in "length overall" (or LOA), whereas the "offshore" includes all vessels greater than 100 feet LOA. Vessels in the 65- to 100-foot range are classified as "midshore" or "middle-distance." Put simply, the inshore is made up of smaller, owner-operated vessels; the offshore comprises larger, company-owned trawlers. The midshore fleet has elements of both, but is considered closer to the offshore in its basic characteristics. The distinction between the two has become somewhat blurred over the years with the emergence of a class of medium-size vessels capable of straddling inshore and offshore waters.
- (13) In 1982, the Kirby Task Force on Atlantic Fisheries projected a Canadian quota of some 380,000 tonnes by 1987. The Canadian harvest of northern cod, however, never exceeded the Total Allowable Catch (TAC) which, in turn, never exceeded 266,000 tonnes. In January 1989, scientific findings suggested that the stock was much smaller than previously believed. The TAC was set at 235,000 tonnes in 1989, at 199,262 tonnes in 1990 and at 190,000 tonnes in 1991. For 1992, it was initially lowered to 185,000 tonnes, but cut again in February 1992 to 120,000 tonnes. This effectively shut down the offshore winter fishery.
- (14) Assessments and projections were incorrectly based on constant growth rates and recruitment levels based on 1960s and 1970s data (even though those levels and rates proved to be much lower).
- (15) The fleet is believed to have harvested substantially higher volumes of fish than were reported to the Department of Fisheries and Oceans.

- The assumption that all stocks would be exploited at a fishing mortality level of approximately 20% of the fishable biomass (the F0.1 reference point), even though the fishing pressures on the major groundfish stocks were actually more than twice the assumed level in certain key stocks.⁽¹⁶⁾

On this last point, this Committee was repeatedly warned, over the years, that fisheries scientists were paying far too little attention to basic improvements in landing fish made possible by more modern and technologically efficient vessels and fishing gear, including increasingly accurate fish-finding technologies that can home in on schools of fish and also show their species.⁽¹⁷⁾

It would be an understatement to say that there has been a lack of respect or trust between the scientific community and fishermen and that many fishermen continue to seriously question the DFO's ability to assess fish stocks. Suffice it to say that past miscalculations of the abundance of the resource and the effect of this on the expectations of governments and fishing communities will have far-reaching socio-economic implications over the next decade or more. The Committee, however, does understand that the scientific assessment of fish populations and fisheries management in general is not a precise discipline; the fishery is a complex system and no individual species within it can be treated in isolation, while significant tinkering with any part of it can set up reverberations that echo throughout the whole. In other words, the removal of one species may affect the abundance (and profitability) of others. Canada might have some of the best fisheries science in the world, but we are only at the beginning of putting together the pieces in understanding how the ecosystem really works. For example, predator-prey relationships, notably those involving seals,⁽¹⁸⁾

(16) See for example, Government of Newfoundland and Labrador, Department of Fisheries, *Changing Tides: A Consultative Document on the Fishery of the Future*, March 1993, p. 23; Task Force on Incomes and Adjustment in the Atlantic Fishery, *Charting a New Course: Towards the Fishery of the Future*, Supply and Services Canada, November 1993, p.19-31.

(17) The Committee more recently learned that even in the longline fishery, considered to be a "low tech" activity, a new type of hook (the circle hook) had greatly increased catch rates.

(18) Adult cod have few predators, but juveniles have several, including adult cod and seals. Seals are impeding the rebuilding of groundfish stocks either directly through predation or indirectly through competition for food. On 28 June 1995, the DFO released, for the first time ever, a study on the amount of fish consumed by harp seals in Newfoundland waters, the Gulf of St. Lawrence and Arctic waters. The study concluded that Atlantic harp seals eat 6.9 million tonnes of fish and other prey annually, about double what was consumed in 1981. Of that number, 3.2 million tonnes (46%) is eaten in Arctic waters, 2.8 million tonnes (40%) in Newfoundland waters, and approximately 1 million tonnes (14%) in the Gulf of St. Lawrence. The harp seal population is estimated to be 4.8 million in 1994, more than double that in the mid-1970s. Birth control experiments currently underway may eventually help curb the growth of seal populations.

are just beginning to be scientifically understood, while it is becoming clear that seal predation is impeding (or slowing down) the recovery of groundfish stocks. This Committee supports a cull to achieve a meaningful reduction in the seal population.

RECENT FEDERAL GOVERNMENT INITIATIVES

At the most basic level, fisheries management involves solving two fundamental problems. The first is conservation: deciding what amount of fish can be harvested on a sustainable basis. The second is allocation: deciding who benefits, in what ways, and to what extent. Perhaps the most significant change in fishery management since the early 1990s is the much greater emphasis placed on conservation. As Dr. Doubleday remarked:

Previously, there was a tendency not to take severe conservation measures unless they were seen to be absolutely necessary. Now the weight is on the other side; that is, if an error is going to be made, it will be made on the side of protecting the resource rather than allowing too much to be caught.⁽¹⁹⁾

Another major change in the way decisions are made resulted from the creation in December 1992 of the Fisheries Resource Conservation Council (FRCC), an industry/science management body to examine research, stock assessment methodologies and quota levels, hold public hearings on resource assessments and conservation measures, and provide public written advice to the federal Minister of Fisheries.⁽²⁰⁾ The Council's mandate specifically includes three guiding principles: fisheries resource conservation through an ecological approach;⁽²¹⁾ creation of a partnership among government, scientists and industry; and consultation with the Council's client groups in preparation of public recommendations to the Minister.

(19) *Proceedings of the Standing Committee on Fisheries*, Issue No. 3, p. 14.

(20) The Council replaced the Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC) and the Atlantic Groundfish Advisory Committee (AGAC) for the purposes of recommending harvest levels and conservation measures; it is composed of 14 external members drawn from the fishing industry and the academic/scientific community, three *ex officio* members from DFO, and six provincial delegates appointed by the concerned provincial and territorial governments.

(21) In its last two reports, the FRCC has recommended that the Department of Fisheries and Oceans move to an ecosystem approach in its management of the fisheries.

Many fishermen have become increasingly more involved in the management of fisheries by developing conservation-oriented harvesting plans. Resource assessments are becoming more dependent on research vessels' surveys and information provided by sentinel fisheries, which incorporate fishermen's experience with the DFO's scientific research effort to study fish stocks currently under moratorium.⁽²²⁾ These cooperative efforts, it is hoped, will help develop the level of trust between fishermen and scientists and result in effective partnerships.

In past reports, the Senate Committee on Fisheries has stressed the need for fishermen, with their specialized and intimate (although anecdotal) knowledge of the marine ecosystem they exploit, to work with the scientists. The current crisis might have been avoided if fishermen had been more involved in decision-making and if participants in the industry had been more cooperative and truthful about the quantities of fish that were caught, discarded and landed.

It is worthy of note that the DFO is considering the testing of various types of cooperative arrangements for managing the commercial fisheries, which may ultimately require sharing decision-making and special agreements between the Department and fishery participants. A related undertaking is a review of the commercial and recreational licence fee structures and fees for other departmental services.⁽²³⁾ Many fishing licence holders understandably voice their concern about the proposed new fees.⁽²⁴⁾

In May 1994, the Atlantic Groundfish Strategy (TAGS) was introduced.⁽²⁵⁾ The Strategy is a five-year program of adjustment and support for some 40,000 eligible fishermen and fish

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- (22) Because of the many fishery closures now in place, commercial fisheries data, which were a major part of the assessment database, are no longer available. Sentinel fishery projects employ a limited number of professional fishermen who are trained in scientific data collection.
- (23) Approximately \$33 million in additional federal revenue in fiscal 1996-97 is expected to result from this initiative, increasing to \$50 million. In the Atlantic region, the proposed changes will add \$25.8 million to licence and registration fees paid, bringing the total collected for the area to \$30.1 million. The federal government is looking at higher licence fees in the form of a landings tax.
- (24) Those concerns include the lack of correspondence between access and management costs and the use of gross incomes rather than net incomes to calculate the fees. The Fisheries Council of Canada doubts that there are sufficient earnings in the fishery to justify the level of fees proposed.
- (25) Other programs of income assistance and adjustment which have since ended (during the 1994-95 fiscal year) included the Atlantic Fisheries Adjustment Program (AFAP), the Northern Cod Adjustment and Recovery Program (NCARP), the Atlantic Groundfish Adjustment Program (AGAP), and the Transitional Fisheries Adjustment Allowance (TFAA).

plant workers displaced as a result of the collapse of the groundfish fishery. Approximately 12,000 applicants have been rejected. The Department of Human Resources Development (HRD) administers the bulk of the \$1.9 billion budget for TAGS (i.e., adjustment measures for individuals, training and income support), while the DFO is responsible for \$271.8 million of the total (i.e., industry renewal and capacity reduction). The Department of HRD has been overwhelmed by the number of clients. In August 1995, the federal government tightened the eligibility requirements for income support under TAGS to help bring its compensation program within budget; however, this \$70-million adjustment will succeed in cutting only a fraction of the program's \$400-million budget overrun.⁽²⁶⁾

In October 1994, the Minister of Fisheries and Oceans announced the formation of regional Harvesting Adjustment Boards (HABS) to assist the Department with harvesting capacity reduction by fishing area and fleet sector.⁽²⁷⁾ The objective is a 50% reduction in fishing capacity through licence retirement, early retirement⁽²⁸⁾ and other complementary initiatives, such as licensing reform and a program of professionalization for fishermen.⁽²⁹⁾

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- (26) TAGS has been in financial trouble since its introduction because 50% more people than anticipated applied for benefits. The latest changes to the program, which took effect on 1 September 1995, include: the creation of a \$20,000 annual employment income threshold (with benefits reduced dollar for dollar for anyone earning more than the threshold); an annual two-week period during which benefits will not be paid (a reduction that can be spread over 20 weeks); and the requirement that earnings be reported over the weeks they are earned instead of when they are paid. TAGS pays between \$211 and \$382 per week to recipients, depending upon past earnings. Most recipients are from Newfoundland and Labrador.
- (27) HABS were established in each of the four management regions of the DFO (i.e., the Gulf Region, the Newfoundland Region, the Scotia-Fundy Region, and the Quebec Region).
- (28) Under the Atlantic Fishers Early Retirement Program (AFERP) and Fisheries Older Workers' Adjustment Program (FOWAP), displaced fishermen and fish plant workers between 55 and 64 years of age as of 15 May 1995 can voluntarily apply for early retirement benefits. The AFERP and FOWAP are administered by the DFO and HRD, respectively. The combined costs of the federal contribution for the two initiatives is expected to be \$86 million. Agreement in principle has been reached on the AFERP for fishermen in Newfoundland, Nova Scotia, PEI, and with the province of Quebec.
- (29) In March 1992, a six-member Task Force on Incomes and Adjustment (chaired by Richard Cashin who, at the time, was President of the Newfoundland Fishermen, Food and Allied Workers Union) was established "to advise on the continued supply of the resource, the future stability and profitability of the industry, the achievement of stable and adequate incomes for those who make a living in the fishery, and alternative training, employment and other adjustment possibilities." In its final report (November 1993), the Task Force recommended, among other things, that capacity in both harvesting and processing be reduced by 40% to 50% (to eventually match the limits of the rebuilt resource), and that the necessary infrastructure and a core group of professional fishermen and skilled workers be maintained until the stocks recover.

Under TAGS, Special Eligibility Criteria (SEC) were developed to qualify those fishermen eligible to participate in the groundfish licence retirement program and those who may receive licences from retiring fishermen. The SEC were also developed to differentiate fishermen with long-term attachment and significant dependence on the fishery from those with a weaker connection.

There exist some 14,000 groundfish licences in the Atlantic region; according to the DFO, nearly 4,000 of these are currently held by fishermen who are marginally connected to the fishery.⁽³⁰⁾ At the time of writing this report, the fate of groundfish fishermen who do not meet the SEC has yet to be determined. Under an Atlantic licensing policy review launched in May 1995,⁽³¹⁾ the options contemplated by government and industry included making their licences either non-reissuable (non-transferable), non-reissuable and terminated after 5 years, or non-renewable. The purpose of the review has been to identify, for management purposes, a future "core fishery" built on a "business-like basis," and to achieve a permanent reduction of harvesting capacity.

In March 1995, a "Round Table on the Future of the Atlantic Fishery," involving industry participants and stakeholders, was held in Montreal; this produced "statements of consensus" on general objectives for the fishery of the future and other matters. A separate initiative is underway to define "professional fishers," under the lead of fishermen's organizations but with the assistance of the DFO.

THE OBJECTIVES OF FEDERAL FISHERIES POLICY

On 1 January 1977, following a series of lengthy international negotiations at the United Nations Law of the Sea Conferences, Canadian jurisdiction over coastal waters was extended to 200 nautical miles (370 kilometres) from the previous 12 miles, taking in most (but not all) of the best fishing grounds along the East Coast. In the years that followed and in anticipation of a boom, banks provided loans to fishermen and processors to expand their operations and government subsidies were handed out for the purchase of new vessels, the expansion of existing fish plants and

(30) Department of Fisheries and Oceans, *Atlantic Licensing Policy Review: Consultation Document*, Supply and Services Canada, May 1995, p. 15.

(31) On that date, a temporary suspension was placed on the transfer of groundfish licences held by those fishermen who did not meet the SEC. The timetable for public consultations was extended on 10 July 1995.

for the building of new ones. The planned gradual displacement of the foreign fleet was seen to provide a particularly good opportunity to expand the Canadian offshore.⁽³²⁾

By 1981, however, the industry experienced the pinch of depressed markets and large inventories made up especially of frozen fish destined for the United States market. The problem was compounded by high interest rates, a relatively strong Canadian dollar which undermined the industry's competitiveness in export markets, and good catches of competing species of fish from other countries. The industry's last major downturn, in the early 1980s, was essentially financial; the crisis centred on the offshore. For many firms on the East Coast, the result was dashed expectations, imminent bankruptcy, and an appeal for government assistance to prevent a collapse of the industry.

In January 1982, the federal government appointed Dr. Michael Kirby to head up a new Task Force on Atlantic Fisheries. The Kirby Task Force *Report (Navigating Troubled Waters: A New Policy for the Atlantic Fisheries*, also known as the Kirby Report), released the following year, predicted that the trawler fleet would play an important part in the future of the groundfish fishery in view of: the successful rebuilding of Canadian groundfish stocks and corresponding high catch rates; the introduction of Enterprise Allocations (to permit much better use of capital invested in the fleet); the fact that Iceland (Canada's principal competitor) had turned to trawlers (and would therefore bear the cost structure of this technology). Moreover, there was no practical alternative method offering the year-round capability of stern trawlers.⁽³³⁾

(32) The fleet essentially multiplied its capacity to find, catch and transport fish. Heady expectations of larger catches led to a rapid increase in catching power; new, more modern and technologically efficient vessels and gear were introduced. Fishermen could now determine not only the whereabouts of fish through increasingly accurate fish-finding technologies, but could also pursue them to areas that had previously been inaccessible. To counter the intent of a licensing system based on specified boat-length restrictions, new craft were also equipped with deeper and wider holds. This, in turn, placed heavier demands upon the stocks since larger investments had to be justified by large catches of fish.

(33) Although the Report's 57 recommendations (on "how to achieve and maintain a viable Atlantic fishing industry, with due consideration for the overall economic and social development of the Atlantic provinces") do not permit simple summarization, the underlying thrust can be found in the prioritized policy objectives for the East Coast fishery: first, the Atlantic fishing industry should be economically viable on an ongoing basis, where to be viable implies an ability to survive downturns with only a normal business failure rate and without government assistance; second, employment in the Atlantic fishing industry should be maximized, subject to the constraint that those employed receive a reasonable income as a result of fishery-related activities, including fishery-related income transfer payments. A third objective was that fish within the 200-mile Canadian zone would be harvested and processed by Canadians and by firms owned by Canadians wherever this was consistent with the preceding objectives and with Canada's international treaty obligations.

A "restructuring" process followed which involved the infusion of public money (called a one-time assistance effort) to refinance and amalgamate a number of major processing firms operating offshore trawler fleets. Two new vertically integrated industry giants emerged, one based in Newfoundland -- Fishery Products International -- and the other in Nova Scotia -- National Sea Products. Although subsequent market strength allowed these companies to return to private hands, many have since pointed out that virtually nothing was done at the time to assist independent fishermen, processors and cooperatives. Over the years, those spokespersons who appeared before the Senate Committee from the small-boat sector stated that the "financial bailout" had introduced distortions into the natural course of the industry.

Since their creation, it has been widely assumed that vertically integrated offshore companies have had distinct economic advantages over the inshore in terms of both the harvesting and processing of fish. Those advantages -- such as higher labour productivity, greater plant utilization and efficiency, a year-round supply of fish to markets and sophisticated marketing expertise -- have been largely attributed to their capital-intensive, high-volume and business-like characteristics.

Although the need for an offshore sector has often been questioned, there are a number of reasons usually given to justify it. Some species can be harvested only with offshore fishing technology, and some coastal areas have been historically dependent on stocks fished offshore. However, the most recurring argument in favour of the offshore (and midshore) is that the sector can take fish in any season of the year, while the inshore typically proceeds in seasonal cycles (because of fish migrations, and environmental constraints such as weather and ice conditions) that rule out the possibilities of orderly marketing (i.e., meeting the market requirement of year-round supply). From the offshore's perspective, this marketing advantage is strategically significant because some 80% of the total Atlantic production is usually exported annually.

The inshore fishery, on the other hand, is often portrayed as the "social fishery" -- over-subsidized (by Unemployment Insurance), and too overcapitalized and inefficient to operate profitably. The Committee heard time and time again during its hearings over the past decade that many participants in the inshore believe that government and policy-makers have had a hidden agenda favouring the offshore. The Committee was frequently told that history had proven inshore fishermen and small fish plant operators to be capable of adapting, adjusting and remaining competitive in the face of changing circumstances. In a boom-and-bust industry like the fishery, such adaptability, it is

argued, should be highly valued. Moreover, this sector of the industry is said to keep much of its economic benefits in rural areas. Representatives of the small-boat sector invariably express great concern about jobs, incomes and the socio-economic benefits which spin out of their sector into rural communities throughout the five eastern provinces.

It may be fairly observed that there is no conclusive evidence that the offshore (or the inshore) is either more effective in meeting wider public policy objectives, such as employment and economic viability and sustainability, or more efficient or economical in terms of successfully converting resources to achieve those policy objectives. This is especially so since those objectives have never been clearly or explicitly enunciated. Policies have usually been stated in broad general terms that can be interpreted in various ways in order to appeal to a wide audience. The climate of suspicion and animosity that has characterized the fishery is therefore understandable.

In its 1993 report on the Atlantic inshore sector, the Senate Committee on Fisheries pointed out in the following terms that the underlying principles guiding resource allocation had been too vaguely stated in the Atlantic Groundfish Management Plans:

Allocation of fishery resources will be on the basis of equity, taking into account adjacency to the resource, the relative dependence of coastal communities, and the various fleet sectors upon a given resource, and economic efficiency and fleet mobility.⁽³⁴⁾

In a related vein, Mr. Gilles Thériault (President of GTA Consultants Inc.) stated the following when he appeared before the Committee:

We presently have a mishmash of measures in place to manage our resources. When we look at these measures individually, they all have their *raison d'être* and appear to make sense. When we look at them as a whole, there are a lot of inconsistencies, and even contradictions, that just do not appear to make sense. There is a reason why this is so. In fisheries, we presently lack a clearly outlined and established set of guiding principles, from which all rules and regulations are derived.⁽³⁵⁾

(34) Department of Fisheries and Oceans, "Basic Principles," *Atlantic Groundfish Management Plan*, December, various years.

(35) *Proceedings of the Standing Senate Committee on Fisheries*, Issue No. 4, p. 8.

The consultant went on to enumerate what he believed should be the guiding principles in resource management, and proposed that a quasi-judicial board be established to oversee that these guiding principles are respected; anyone wishing to challenge an activity, a rule or a regulation would be allowed to do so before the board, which would have the power to determine whether such activities, rules or regulations were acceptable or not.

In past reports, this Committee has also deplored the fact that, for too many years, the fishery has lacked a clear and consistent vision, including an explicit statement of objectives, priorities and strategies to provide government and industry with a longer term rationale for decision-making and to ensure that both are moving together in a common direction.⁽³⁶⁾ Reaching common goals will necessarily require all stakeholders to have a common understanding of what is meant by terms such as partnership, sustainability, efficiency, viability, overcapacity, common property (or "quasi-property" right), etc.

Although there is often general agreement on the problems, there is still considerable disagreement between the various interests about what the Atlantic fishery of the future should look like. For example, definitions of viability in the industry vary considerably. A recent report prepared by the Fisheries Council of Canada (FCC) states that the future of the fishery should be "an economically sound, market driven and self-managed industry offering investors secure and stable opportunities, and accountable to Canadians for the health of the resource and capable of making a net contribution to the Canadian economy." The Eastern Fishermen's Federation (EFF), on the other hand, sees a viable fishery as one that rewards efficiency and productivity yet maximizes employment within the limits of the resource. The FCC strongly promotes the idea of further privatizing the fishery and moving toward a system of "secure, tradable harvesting rights," while the Canadian Council of Professional Fish Harvesters (CCPFH) espouses the concepts of common property and competitive

(36) The basic objective of the federal Department of Fisheries and Oceans has been defined as follows: "to undertake policies and programs in support of Canada's economic, ecological and scientific interests in the oceans and inland waters; to provide for the conservation, development and sustained economic utilization of Canada's fisheries resources in marine and inland waters for those who derive their livelihood or benefit from these resources; and to coordinate the policies and programs of the Government of Canada respecting oceans." Department of Fisheries and Oceans, *Estimates, Expenditure Plan, Part III*, for various years.

fishing (i.e., a fishery that "spreads the economic benefits among those who catch the fish and their communities, and avoids the concentration of wealth that follows privatizing the resource").

Beyond these issues are such considerations as the kind of technology that is most appropriate for the industry to use, the proper allocation of resources, and the question of whether certain industry components are still relevant, or even desirable.

OVERCAPACITY IN THE HARVESTING SECTOR

While other federal departments deal with fisheries matters, the primary focus of the DFO is water and its resources. The mandate of the Department extends beyond conservation, however.

The challenge faced by the Department has been how to maintain resources at acceptable levels for all interested parties, and balance access and limit fishing effort so as to achieve the most good for the most people. Because there has generally been more catching capacity than the resource could support, the harvesting sector has been subject to a broad range of departmental and regulatory controls, which have not always been popular among fishermen and processors. The fishery also seems to defy simple generalizations,⁽³⁷⁾ unlike other natural resource-based industries, the hidden character of the fishery resource makes its management especially difficult.

"Overcapitalized" is the word most often used to describe the harvesting sector of the Atlantic fishery. Over-dependence on the fishery is said to have resulted from a social, historical tradition of "the right to fish" among Atlantic Canadians, a lack of economic alternatives, and the use of the fishery as the employer of last resort. Many contend that successive governments have

(37) Species of fish vary widely with respect to behaviour, abundance, distribution, migratory patterns and market value. Fishermen hold different types of licences, fish from boats of different sizes, use different types of gear, belong to different organizations, and invest different amounts of time and money. Fishermen from several provinces often fish in common areas (e.g., in the Gulf of St. Lawrence). The complexion of the industry changes notably from one area to the next. There are conflicts between levels of government and fishing fleets because supply is determined by federal government decisions on fish allocation, licensing and overall levels of exploitation. Processing is as diverse as the harvesting sector, with companies ranging from small independently owned firms and co-operatives to large vertically integrated ones. Some facilities have acted as collection stations, partly processing the fish for delivery to larger plants. Because of the seasonal nature of some fisheries, many plants along the coastline have been idle for much of every year.

concentrated too much on social objectives (e.g., maximizing employment) to the detriment of economic goals.

For many, the unfortunate result of moving foreign fleets outside the 200-mile limit was the development of a Canadian fishing effort equally capable of depleting the resource. Even before the current crisis, the groundfish sector was said to be characterized by severe and chronic overcapacity in harvesting and processing. For example, by 1988, the Scotia-Fundy Region was estimated as having four times the fishing capacity needed to harvest the available groundfish.⁽³⁸⁾ DFO economists have estimated that, for the period between 1980 and 1989, excess harvesting capacity in the Atlantic region ranged from an average high of 75% in New Brunswick to an average low of 37% in Prince Edward Island.

It is interesting to note that the second paragraph of a recent "Consultation Document on the Atlantic Licensing Policy Review" states that, "essentially, the fishery is characterized by too many people involved, low income and overcapacity which result in wasted competing resources, dissipation of wealth and more pressure on the stocks."⁽³⁹⁾ The inshore groundfish fishery on the East Coast is singled out as a good example of this. As mentioned earlier, a 50% reduction in harvesting capacity is targeted by the federal Department of Fisheries and Oceans.⁽⁴⁰⁾ A fundamental issue is whether the current crisis has been caused by overcapacity, defined simply as "too many fishermen"

(38) Groundfish Capacity Advisory Committee, *Report*, 10 November 1988. For the Scotia-Fundy inshore mobile gear fleet, the Gross Registered Tonnage (or GRT, a measure of fish holding capacity), increased 2.5 fold from 1980 to 1989.

(39) Department of Fisheries and Oceans, *Atlantic Licensing Policy Review: Consultation Document*, May 1995, p. 7.

(40) The Cashin Task Force on Incomes and Adjustment in the Atlantic Fishery recommended that capacity be reduced, in both the harvesting and processing sectors, by up to 50%. The Task Force reasoned that the total groundfish catch, after stocks recover, would be at least one-third lower than those experienced in the 1980s, and that the total harvest in five to ten years would likely be 550,000 tonnes. Of this total, cod would make up to 300,000 tonnes. According to the Task Force, harvesting and processing capacity would therefore have to be reduced by about 40% to 50%.

chasing too few fish, or as "too much fishing effort": too many boats using too efficient technologies. The Department has never clearly defined the term.⁽⁴¹⁾

Basic to any future actions to overcome the shortcomings of the past and to deal with the realities of the present should be some of the following:

A. The Inshore/Offshore Split

Although often dismissed by policy-makers dealing with the problem of overcapacity, the allocation of fish between the two main sectors of the industry -- the "inshore" (the small-boat sector) and the "offshore" (the trawler fleet) merits a closer look. Although it is difficult to make completely accurate generalizations, the basic differences between the two can be summed up as follows: small- *versus* large-scale operations; individual vessel ownership *versus* corporate ownership; labour-intensive *versus* capital-intensive fishing operations; seasonal *versus* year-round operations (in normal times); and dispersal over a large number of small, rural fishing communities *versus* concentration in a small number of larger communities.

The debate as to the relative performance and importance of the two industry sectors has centred largely on the contentious issue of the allocation of fish quotas between the fleets, particularly when these compete for a share of limited or declining fish stocks. As the resource rebuilds, a process needs to be developed to determine when fisheries are to be reopened, including biological criteria to justify any such decisions. Any resumption of fishing will have to be done in an "equitable" manner.

Changes in fish allocations to the small-boat sector, variations in inshore catch levels or changes in the amounts of fish processed have had significant consequences for the viability of hundreds of scattered fishing communities in the region for which the fishery is the basis of existence. In some areas, fishermen have relied on a variety of activities (e.g, small-scale farming, sealing, lumbering) to generate income. It is often pointed out that, in the case of the small-boat sector,

(41) In defining fishing effort and linking it to harvesting capacity, biologists and resource managers generally focus on physical characteristics, such as the number of fishing days or vessel attributes. Economists, for their part, are usually more interested in capacity as it pertains to the capital and labour employed in the fishery. Capacity, however, can be more fairly described as a combination of technology and people: boats, electronics, fishing gear, people and human skills.

fishing is not only an economic activity, but also an economic base for a social situation. Although most coastal fishermen have had only modest incomes at best,⁽⁴²⁾ many, if not all, are committed to fishing as a family tradition or way of life and are often ill-prepared for jobs that do not involve skills learned in fishing. Thus, policy-makers must acknowledge that the coastal sector is a social and cultural enterprise, as well as an economic enterprise; any discussion of the Atlantic fishery must include the non-economic realities of the industry, that is to say the social contributions of fishing, which are admittedly more difficult to measure than the purely economic.

As a rule, approximately 95% of all registered fishermen have normally operated seasonally from privately owned vessels less than 100 feet in length overall (or LOA), and have usually accounted for about half of total groundfish landings by volume. Prior to the moratoria on fishing now in place, the total groundfish quota was divided about equally between the small-boat and offshore fleets. The inshore sector, however, normally provided the bulk of all direct employment derived from the industry, that is to say 95% of fishing jobs and roughly two-thirds of fish plant work on the East Coast. The remaining fishermen (in the offshore, that is to say 5% of the fishermen) operated year-round from company-owned trawlers.

On fish allocation, one spokesperson from the inshore fixed-gear sector, Mr. Gary Dedrick (Executive Director of the Southwest Nova Fixed Gear Association and President of the Eastern Fishermen's Federation), suggested to the Committee that the coastal sector should have first claim upon the resource because of certain historic and moral rights; he strongly questioned the so-called "inshore-offshore split." The following quotation from his testimony conveys the nature of the discussion:

The government has stated that it wants to downsize the industry by 50%... I believe that the fishermen could survive in this fishery,... if the real issues are addressed ...As always, the overall quotas are unfair and stacked in favour of the offshore fleet... DFO's agenda is the same now as it was in 1982 when they privatized the fishery with just the

(42) A few Atlantic fishermen have done very well in the industry, but many have done rather poorly. The Cashin Task Force reported that in 1990, 3,800 fishermen made more than \$35,000 in total income (their average earnings being more than \$50,000), and another 7,800 made between \$20,000 and \$35,000. However, two-thirds of Atlantic fishermen made less than \$20,000, and nearly one-quarter of them made less than \$10,000. Average sector employment income in the fishery (i.e., excluding other employment income and transfers) was said to be about half of that earned in other Atlantic primary sectors and less than half of the average income earned across all Atlantic industries. Task Force on Incomes and Adjustment in the Atlantic Fishery, *Charting a New Course* ..., November 1993, p. 8, 162.

stroke of the pen - when they gave half the resource to the offshore... This Total Allowable Catch needs to be restructured and divided more fairly... Gear technology and the division of the TAC was never taken into consideration when the government decided to restructure the fishery. Those decisions are etched in stone, yet they say they want to restructure the fishery. It is a farce to people like me who struggle to continue.⁽⁴³⁾

With regard to jobs, there is no question that the inshore maximizes employment, albeit usually for a shorter annual period of time than the offshore. There have been, however, significant regional variations in terms of the person-years of employment generated by the fishery. In Newfoundland in 1989, for instance, 1,000 tonnes of groundfish reportedly generated 41 ("full-time") person-years of total employment inshore, but only 23 person-years of employment offshore. In the DFO's Scotia-Fundy Region, 1,000 tonnes generated 31 person-years of employment in both the inshore and offshore.⁽⁴⁴⁾ Because much of the employment in the small-boat sector has been seasonal, 1,000 tonnes of fish actually provided work for more people than the figures indicate.

It is noteworthy that seafood has enjoyed a period of unprecedented demand in world markets, particularly in the United States where, for reasons of health and nutrition, or as a sophisticated gourmet item, fish is now eaten more than ever before. Whereas fish used to be associated in some religions with fasting and often regarded as the "food of the poor," it has become an expensive product for people who have the means to buy it. Because of the present high market price for fish, members of the Senate Committee have surmised that inshore fishermen could perhaps earn a good living today with less than they used to catch.

A relatively more labour-intensive development in the Atlantic region, where unemployment is high and alternative job opportunities scarce, would seem to make more sense than capital-intensive technology. Large investments in fishing capacity (e.g., vessels and technology) need to catch large quantities of saleable fish in order to be viable. Larger investments, in turn, lead to the temptation to highgrade, dump, misreport and overfish. Large investments in processing facilities

(43) *Proceedings of the Standing Senate Committee on Fisheries*, Issue No. 5, p. 5, 7-8.

(44) Department of Fisheries and Oceans, 21 April 1989. The most developed inshore fishery on the East Coast in terms of incomes, capital investment and infrastructure has been in southwest Nova Scotia; its relatively longer fishing season, proximity to the American market, and warmer water lead to a usually richer resource base.

create a demand for a minimum throughput of fish. One passage from a document distributed at the March 1995 Round Table on the Future of the Atlantic Fishery describes the situation in the following terms:

In the mid-1980s, companies were fishing for markets. Captains were given specific instructions on what species to bring back, of what sizes and in what quantities. When the load of fish differed from the required species mix, captains and crews were penalized. The only way to stay within the required species mix was to highgrade, dump and discard...The abusive fishing practices became tacitly accepted as the way of doing business and they became so entrenched that they continued in 1994 in areas where groundfisheries were open.⁽⁴⁵⁾

One result of such destructive and grossly wasteful fishing is a severe deterioration of the quality of the catch data used in stock assessment and in the historical data on which resource decisions are based.

On the subject of fish allocation, policy-makers should be aware that the migrations of a number of stocks into coastal waters suggest it would be possible to land catches very cost-effectively. Species such as cod and herring migrate from offshore into inshore waters during late spring and early summer and move out again during the fall and early winter. Fishing methods that rely on waiting for fish to come into contact with the gear are termed "passive." The efficiency of traditional passive gear in the province of Newfoundland and Labrador can be judged by the fact that, prior to the development of the offshore trawler fishery for northern cod, the inshore was able to harvest annually an average of 250,000 tonnes of fish.⁽⁴⁶⁾

Officials of the DFO remarked that the offshore sector's participation in the fishery does not depend on the fishing licences held, but rather on the size of the quotas (i.e., Enterprise Allocations) assigned to the companies. In other words, in contrast to the inshore (where the fishing of an overall quota takes place on a competitive basis), offshore operations are controlled by the amount of fish allocated to them, which determines how much investment they put into their

(45) Round Table on Atlantic Fisheries, "Fishing Effort and Capacity Considerations," March 1995, p.6. The practice is known as the "shopping list" approach.

(46) This average is more than total landings from the stock in recent years, when most of the fish were caught by the offshore.

operations. Capacity in the offshore was said to be being reduced through the decommissioning and sale of vessels.

B. Licensing and the Inshore Sector

Since 1981, in order to identify fishermen most dependent on the fishery for their livelihood, commercial fishermen have been classified either "full-time/bona fide" or "part-time/commercial," based on their participation in fisheries during preceding years and their employment outside the fishery. The Committee is mindful that licensing is an exceedingly complex and politically sensitive issue in the Atlantic fishery.

A fishing licence grants a person or enterprise permission to fish. Pursuant to the authority of the Minister of Fisheries and Oceans, a licence is not a permanent or absolute right; the licensee essentially acquires a limited privilege.⁽⁴⁷⁾ Issues concerning licensing and fish allocation invariably lead into other areas of fisheries management. Decisions as to who gets what, when, where, how and why have strong political overtones. Suffice it to say that those decisions have had immediate and dramatic impacts on the lives and incomes of various individuals and groups in the industry.

Licence retirement, under TAGS, is being offered as a means of reducing capacity; however, officials of the DFO told the Committee that the licence retirement program, in itself, would not be sufficient to achieve the 50% reduction target set by the Department, and that a licensing policy review had been initiated to address longer term changes to licensing policy.

There are about 58,700 registered fishermen in the five Atlantic provinces, 28,600 of whom are in the full-time category. There are roughly 25,200 registered vessels.⁽⁴⁸⁾ About 25,000 fishermen hold a total of 55,800 licences for commercially exploited species, including 14,000 Atlantic

(47) The *Fisheries Act* is the basic statute administered by the Department, and governs such matters. Statutory provisions are applied in day-to-day fisheries management through regulations which are periodically updated. Licences may specify any one or more of the following conditions: the species of fish and quantities permitted to be taken; the waters in which fishing is permitted; the period during which fishing is permitted; the vessel permitted; the person or persons permitted to operate the specified vessel; the type and quantity of fishing gear and equipment permitted; and the specific location at which fishing gear is permitted to be set.

(48) Every vessel used in a commercial fishery must be registered annually in the name of one licence holder. Such registered vessels, however, are not necessarily active in the fishery.

groundfish licences. According to the DFO, nearly 4,000 of these licences are held by fishermen with a marginal attachment to the fishery.

Under TAGS, Special Eligibility Criteria (SEC) were developed, among other things, to identify those fishermen eligible to participate in the groundfish licence retirement program and those who may receive licences from retiring fishermen. The SEC were also developed to distinguish fishermen with long-term and significant dependence on the fishery from those with lesser attachment.⁽⁴⁹⁾ The Committee learned that approximately 6,200 licence holders meet the SEC, and that 1,600 eligible bids (under a "reverse option process") for licence retirement had been received in a first round of bidding, which ended on 31 March 1995. The process was said to be unlike past buy-back programs in that fishermen are essentially bidding against each other.⁽⁵⁰⁾ On 11 October, it was announced that payments of \$31 million were authorized to 252 licence holders. The average value of successful bids was \$121,000; a total of \$50 million was allocated for the first round of bidding.

The federal government has also proposed that a new "core" status be created in the inshore fishery for those licence holders having a major dependence on the fishery, and that the number of core enterprises be fixed. Anyone outside the core could enter the core fishery only by replacing another core enterprise. The SEC are envisioned by the DFO as a close proxy to the criteria used to identify the fishermen who would receive core status. At the time of writing this report, the fate of fishermen who do not meet the SEC has yet to be determined; the options contemplated by government and industry include making their licences either non-reissuable (non-transferable), non-reissuable and terminated in five years, or non-renewable.

Many, if not most, fishermen believe there will be a place for them in the industry, a persistent hope that has hampered efforts to move people out of the fishery.

(49) To qualify under the SEC, a fisherman must: be the head of a fishing enterprise; have seven years of full-time fishing experience (five years with full-time/bona fide registration status); and have a gross annual enterprise fishing income of at least \$3,000 and 75% of earned personal income from fishing in three of the four years that would have been used to qualify for the Atlantic Groundfish Strategy, or have had gross revenue from the fishing enterprise of at least \$20,000 in two of the four TAGS qualifying years.

(50) Individual fishermen voluntarily submit bids indicating the amount of money it would take for them to surrender their licences to the government. A bid is assessed against bids from other fishermen with similar vessels and fishing gear. A successful bidder is paid the full amount specified in the bid and is free to dispose of the vessel and fishing gear as he sees fit.

A pivotal question, therefore, becomes the extent to which the federal government should favour a smaller number of full-time "core" fishermen over a larger number of "marginal" operators who engage in the fishery for a relatively limited season only, including those who work at other occupations. The Cashin Task Force on Incomes and Adjustment in the Atlantic Fishery remarked, in 1993, that many individuals found "their way into the ranks of the fishery by doing just enough to meet their own objectives of topping up their income and by qualifying for special Fishermen's UI benefits."⁽⁵¹⁾

The Committee was made aware that the industry and the Department of Fisheries and Oceans are moving to a system in which only "professional" or "certified" fishermen will be allowed to fish. One major proposal for professionalization and certification developed in the province of Newfoundland was said to be taking hold in other regions of the East Coast through the Canadian Council of Professional Fish Harvesters (CCPFH). Predictably, where organizations of full-time fishermen exist in the Atlantic fishery, they have advanced the cause of professionalization, but whether definitions and classifications will be consistent throughout the Atlantic region is, at the time of writing this document, somewhat unclear.

At the March 1995 Round Table on the Future of the Atlantic Fishery, there was agreement "to support the implementation of the central task of occupational standards of professionalization of fishermen, as led by fishermen's organizations and to adjust government's policies to this new reality."⁽⁵²⁾ There was also approval in principle for developing a Canadian Code of Conduct for responsible fishing practices and endorsement of a licence sanctions policy. The Code is considered to be an integral part of the professionalization initiative.

In pointing out the need for professional status in their industry, those putting forward the proposal see the following benefits: improved levels and stability of income; improved employment; stronger fishermen's organizations; greater involvement in the management of the fishery; improved status in society generally; enhanced information exchange between fishermen and government; and greater compliance with industry standards and regulations. Unlike the situation in

(51) Task Force on Incomes and Adjustment in the Atlantic Fishery, *Charting a New Course ...*, November 1993, p. 9.

(52) Round Table on Atlantic Fisheries, "Statements of Consensus," Montreal, 6-8 March 1995.

Canada (where there are effectively no professional standards or training requirements), the Committee was told that countries throughout the industrialized world (e.g., in Iceland, Norway, the United Kingdom and New Zealand) have professionalization programs.

The issue of specialization *versus* diversification of fishing is important in many parts of the East Coast. Diversification or a "multi-species strategy" (or mixed fishery) is a tradition in many areas, and continues to be widely supported in the industry. For example, the March 1995 Round Table on the Future of the Atlantic Fishery concluded that such fishing in the inshore would be an "important means for enterprises to respond flexibly to fluctuations in the state of the resource and market conditions."⁽⁵³⁾ Indeed, fisheries management policies that permit access to the fishery only to specialized fishermen are perhaps unwise: they assume that there is a level of fishing effort that can be sustained each year with the recruitment of new fish to the fishery being balanced by the overall catch. Fish stocks, however, undergo unpredictable fluctuations that can be entirely independent of fishing effort. One way of deterring fishing in times of resource scarcity is to allow fishermen to turn to other fisheries (or even other occupations) when stocks are low. A multi-licence, multi-species strategy therefore has a built-in conservation feature. Such a risk-spreading fishery is also a rational economic and survival strategy for the small-boat owner and fishing communities.⁽⁵⁴⁾

It is noteworthy that the value of the inshore catch is usually greater than that of the offshore because high-value species, such as lobster and crab, are available to the inshore sector. Offshore fishermen usually operate in only one fishery; inshore and midshore fishermen generally participate in a number of fisheries throughout the season.

(53) *Ibid.*

(54) In the southern Gulf of St. Lawrence, the *bona fide* policy applies. Since 1982, the objectives of the *Bona Fide* Licensing Program have been to ensure access to the benefits of the fishery to those who depended primarily on fishing for a livelihood, to provide as many licences for as many fishermen as possible, and to stop the increase in the number of people relying on the fishery. The only method of becoming a *bona fide* fisherman has been by obtaining the *bona fide* status of an existing fisherman leaving the fishery. The policy established qualifications for holding certain fishing licences and formalized inshore fishermen's traditional multi-species access. As such, there has been a high degree of satisfaction with the designation among fishermen.

C. Gear Technology

The debate over fishing gear -- the whole question of the effects or appropriateness of the various harvesting methods and technologies on Atlantic groundfish stocks -- is often dismissed as a tactic for one coastal area or fleet to have resources reallocated to it from another, or to protect existing shares.

Fishing gear, however, has become important for a number of reasons. First, explanations are being sought for the collapse of much of the groundfish resource. Second, the adverse effects of all types of fishing gear are being aggravated by improved technology and increased fishing power. Third, is the increasing awareness and involvement of the public in environmental issues.

As mentioned earlier, Canada's Atlantic fishery has been largely an inshore fishery,⁽⁵⁵⁾ and much of the fishing gear it has used (e.g., gillnets, traps and longlines) functions "passively." Most of the gear normally used by large-scale operations (trawls) does not. With the possible exception of the Scotia Fundy Region,⁽⁵⁶⁾ the longstanding conflict between the offshore and inshore sectors centres largely on the differences between operators using mobile fishing gear and those using fixed gear.

According to proponents of fixed gear, the DFO's standard position is that the impacts of a gear type on the fishery resource (the intrinsic properties of the gear itself) are secondary to how a gear is used (e.g., it is the size of the boat or the ethics of the skipper that matter). This, they say,

(55) In 1988, 99% of all fishing vessels were boats under 65 feet in length, and three-quarters of all vessels were less than 35 feet LOA. These are commonly used for open-deck fishing. Given size and fishing gear, the average inshore boat is restricted to fishing within the vicinity of home port, rarely venturing further than a day's trip. Inshore vessels in the 35- to 65-foot range, and particularly those in the 45- to 65-foot category, are generally closed-deck fishing boats using mobile gear (seines and trawls) and which can fish hundreds of miles from home port and stay at sea for many days. Although the latter vessels represent only a small minority of the total inshore sector, they have generally accounted for a large share of the total inshore catch (particularly groundfish).

(56) Where there is a well-developed inshore trawl or dragger fleet.

allows the Department to deny the need to evaluate gear technology or make any difficult decisions regarding its use.

Proponents of fixed gear (including environmentalists) contend that small-scale passive fishing should play a greater role in the future, claiming that such fishing is more sustainable and conservation-oriented than mobile gear. In particular, longlining -- a method of fishing involving one main line to which a series of shorter lines with individually-baited hooks are attached -- is regarded as being a relatively benign⁽⁵⁷⁾ and more selective means of catching fish, as well as being more labour-intensive. Longline-caught groundfish are said to bring higher prices due to their higher quality (fish are not crushed in nets when pulled aboard) and larger size,⁽⁵⁸⁾ which produce greater yields in the processing plants.

Trawls for harvesting groundfish, on the other hand, are described by those who speak on behalf of the inshore fixed-gear sector as inherently indiscriminate, wasteful and destructive.⁽⁵⁹⁾ They usually place the blame for the current groundfish crisis squarely on trawl technology, and are convinced that the only way to rebuild the resource and subsequently conserve it is to severely limit the activities and quotas of trawlers and draggers.⁽⁶⁰⁾ Vessels using trawls have been accused since the mid-1980s of excessively and routinely dumping and discarding their catches at sea, including immature fish that had not yet reproduced.⁽⁶¹⁾

It is now commonly accepted that catches on the East Coast have been dumped overboard when fishermen determined them to be expendable. When fishermen are operating under quota licences (Enterprise Allocations or Individual Transferable Quotas), they may dump overboard otherwise marketable fish to make room for or maximize the retention of the highest value catch.

(57) It is argued that, of all fishing methods, longlining is the most difficult to use destructively.

(58) Generally, the size of fish caught depends both on the size of the hook and the size of the bait.

(59) Trawling is a method of fishing in which a large net is dragged along the ocean bottom. Fish collect in the back (the so-called "cod-end") of the net. In Europe, complaints concerning the potentially harmful effects of trawls have existed since the 14th century. In Canada, a 1928 Royal Commission on the Atlantic Fisheries recommended a ban on trawl fishing.

(60) A dragger is a fishing vessel less than 100 feet in length that catches fish with a trawl.

(61) The gear is also said to be open to abuse, such as the insertion of illegal liners, which retain even more small fish in the attempt to increase the catch of larger ones.

This "discarding" or "highgrading" of fish is said to take place when non-selective gear (i.e., trawls) incidentally entraps target species of the wrong size or non-target species as a by-catch. On this, the DFO has been criticized for having failed to recognize the difference between catches (i.e., "removals," or all the fish caught) and landings (i.e., the reported catch, or the removals minus the fish discarded and those smuggled ashore).

Concern has also been expressed over the possible adverse effects of trawls on the reproductive cycle of fish (i.e., on the pre-spawning, spawning and post-spawning behaviour of aggregations of fish). Whether such gear damages fish habitats (i.e., reduces the overall productivity of the ecosystem) is another controversial subject; scientific proof (published evidence) that dragging is harmful to the seabed and bottom-living marine life (the benthos) does not exist. In regard to "groundfish spawn beds," however, it is accepted that commercial species of groundfish do not lay their eggs on the bottom; thus trawls do not harm such beds.

One witness before the Committee, Mr. Gary Dedrick, claimed that trawling with the use of "rock hoppers" (gear that allows trawls to operate on rough ocean bottoms) had transformed a once familiar and favourite fishing spot, made up of rocky pinnacles on the ocean floor ("humps") into one with a flat bottom, from which the fish had disappeared. Further scientific research on the Grand Banks and Scotian Shelf will hopefully elucidate any long-term impacts of trawling on stocks and on the sea floor. Members of the Standing Senate Committee on Fisheries, however, do not accept the proposition that the severe depletion of groundfish stocks is unrelated to certain offshore activities and to certain fishing technologies and destructive fishing practices.

D. Quota Licences

Fisheries managers in Canada and abroad have increasingly experimented with or implemented quota licences, or the allocation of predetermined shares of the Total Allowable Catch (the total quota) to individual fishermen. The expanded use of such licences -- Individual Quotas, or more specifically Individually Transferable Quotas -- is often put forward on the East Coast (and elsewhere) as a means of reducing harvesting capacity at the least cost to government.

An Individual Quota (IQ) is a specific quantity of fish allocated annually to either a person or fishing vessel. An Individual Transferable Quota (ITQ) is a quota that can be transferred (traded or sold) to others in the fishery. In Canada, offshore fisheries are managed under a quota system; these are allocations of fish to individual enterprises or companies, referred to as Enterprise

Allocations (EAs), which can be transferred only on a temporary basis.⁽⁶²⁾ In essence, quota licences provide fishermen or enterprises with a "quasi-property right" to harvest annually a certain quantity of fish -- a sort of swimming inventory. This system "privatizes," to some extent, the so-called "common property" competitive fishery and thus represents a major departure from the traditional fisheries management approach of seeing the resource as a common good.⁽⁶³⁾

The most often cited economic advantages of a quota licence regime are: security of access to the resource and the elimination of the "mad race to the fish"; longer work seasons and more effective coordination of supply with market demand; the potential for more effective long-term planning in terms of capital investments and market development programs; and the reduced need for government regulation. The suggestion is that people fish more responsibly when they own the resource (i.e., that when a renewable resource belongs to all, there is no incentive to preserve it). Transferable quotas are also said to be an effective mechanism to discourage over-capitalization in the harvesting sector by reducing the number of fishermen, as over time some choose to sell their quota licences to others. As such, the DFO considers them to be complementary to some of the initiatives the Department is pursuing under the rubric of licensing policy reform.

Although quota licences may have their advantages, there is no real consensus on extending them. Inshore fixed-gear groundfish fishermen, in particular, blame those operating under quota licences for having destroyed the resource, claiming that catches have been under-reported, highgraded, discarded and dumped. Indeed, the evidence suggests that a major drawback to quota licences (the one most often mentioned in the literature) is the incentive they offer to misreport and intentionally reject low-value fish for higher-valued fish, especially if individual quotas are too small to

(62) For the Canadian offshore groundfish fleet on the Atlantic Coast, an Enterprise Allocation or EA program was first introduced in 1982. Since then, various types of quota licences have gradually gained a foothold in the herring seine fishery, the offshore lobster, scallop, clam and northern shrimp fisheries, and in some segments of the inshore and midshore groundfish fishery (the mobile sector).

(63) When fishing a common quota, fish become "private property" only once they are caught and removed from the water. The so-called "tragedy of the commons" theory in fisheries management holds that an unregulated, open access fishery results in a free-for-all "race" for limited fish stocks in an effort to maximize immediate personal economic gain. This race leads to excessive capacity through investments in bigger and more expensive boats, better gear and more sophisticated equipment, in anticipation of future catches. Since fishermen all react in the same way, however, no one is further ahead and the result is over-exploitation, stock depletion and low incomes. Stability is therefore maintained or restored through government imposition of regulatory measures.

be economically viable.⁽⁶⁴⁾ The practice of "highgrading," in turn, imposed a heavier and costlier burden enforcement, monitoring and surveillance on fisheries managers.

Most ITQ-licensed inshore fishermen, on the one hand, view the system as a means of rationalizing the industry by allowing them to operate in a more "business-like" manner.

The new licensing regime also led to a fundamental rethinking of how to monitor fishing activity. For ITQs, the DFO chose an industry-managed, designed and funded Dockside Monitoring Program aimed at verifying and tracking the landings of each fisherman at the wharf. Under these arrangements, dockside monitors are certified by the Department, but are under contract to the responsible fleet sector; the collection of monitoring charges is a business matter between the fleets and the party contracted.

One witness before the Senate Committee, Mr. Gary Dedrick, described dockside monitoring as an ineffective and patently flawed means to monitor fishing activity (in his words, a "licence to steal") because there is no random at-sea monitoring and because dockside monitors are present at landing sites only for certain hours of the day. In recent years, spokespersons from the inshore have claimed that there are opportunities for collusion between dockside monitors and fishermen, whereby catches may not be properly recorded.

Beyond these problems of enforcement, quota licences are criticized as being unfairly exclusive because of the impracticality of implementing them in certain fisheries and for boats below a given size. For example, the inshore is based in a large number of relatively small and widely dispersed communities throughout the East Coast; given the large number of participants and landing sites, officials of the DFO maintain that a small boat fleet operating under quota licences would be impractical to implement⁽⁶⁵⁾ and too difficult to monitor.⁽⁶⁶⁾

There are usually administrative difficulties in setting initial quota allocations. Some have charged that the individual quota system gives licence-holders preferential access to the resource, thereby gradually forcing non-holders (in the small-boat sector) out of the industry. There is also the

(64) The DFO has yet to quantify the extent of discarding and highgrading.

(65) For example, as one witness explained, harvesting cannot always be extended over longer periods because some species of fish are migratory and do not remain in the same area long enough.

(66) By contrast, the offshore sector is normally concentrated in some 20 larger communities.

widespread belief that Enterprise Allocations have brought enormous gain to vertically integrated offshore companies because they enable the offshore to pay fishermen lower prices for their raw product (landings).⁽⁶⁷⁾

Some fear that transferable quotas could not only lead to a concentration of licences in the hands of a few individuals or corporations, but also to the disruption of local economies and communities if they are transferred across coastal areas (ITQs belong to the licence-holders and not the communities). In this regard, the Committee was informed that federal policy for groundfish draggers operating in southwest Nova Scotia is for ITQ licences to be owned by owner/operator fishermen, with no licence controlling more than 2% of Total Allowable Catches. On the current situation in Nova Scotia, one intervenor, Mr. Sam Elsworth, remarked:

...Only people that hold fishing licences are really entitled to participate in quota management fisheries. Nonetheless, you will find that under the ITQ system there has been a concentration in probably five or six entities. We think that about 80% of the outstanding quota for the inshore mobile [sector] in Nova Scotia is held by about five players. This has been done by civil writ and that sort of thing. It has been done "under the table." It is certainly not up front.⁽⁶⁸⁾

On the issue of giving fishing operations private ownership of fish stocks, the Fisheries Council of Canada (representing the processors) released, in the fall of 1994, a report entitled *Building a Fishery That Works: A Vision for the Atlantic Fisheries*.⁽⁶⁹⁾ The FCC concluded, among other things, that: the number of participants and capacity in the industry be reduced; property rights-based fisheries be implemented wherever this would improve harvesting efficiency and supply conditions; vertical integration be allowed; harvesters have the choice of fishing technology; and that

(67) The Kirby Task Force on Atlantic Fisheries observed in 1982 that offshore landings added to overall supply and therefore, in theory, placed downward pressure on the price of inshore fish, but added that if trawlers were to disappear and the same amount of fish were to be landed instead by inshore vessels, there would be a similar effect on price. Moreover, there would tend to be greater downward pressure, because the additional inshore supply would be landed largely in the peak inshore period when demand is already softening.

(68) *Proceedings of the Standing Senate Committee on Fisheries*, Issue No. 5, p. 13.

(69) See Fisheries Council of Canada, *Building A Fishery That Works: A Vision for the Atlantic Fisheries*, 1994.

government cease to provide assistance which encourages entry to, or discourages exit from, the harvesting and processing sectors.

The Canadian Council of Professional Fish Harvesters, for its part, in a document entitled *Creating New Wealth from the Sea* (March 1995), said:

We believe the fishery is fundamentally a public resource, governed by public policies of limited entry. We feel fishing rights should be earned by historic participation, not bartered on Bay Street. Thus, the use of ITQs and EAs should be carefully limited... [We] find the ideological enthusiasm for this type of management device disquieting. When taken in conjunction with the proposal to eliminate fleet separation, a management device can become the vehicle to end hundreds of years of an owner/operator-based fishery.⁽⁷⁰⁾

The consensus at the March 1995 Round Table on the Future of the Atlantic Fishery was that quota licences should be used as a management tool, but with conditions attached on their expanded use in additional fisheries. It was agreed that: any further introduction of IQs/ITQs/EAs should not confer or take away access to the fishery; there should be support by a clear majority of licence holders in the fishery in question; an intervenor process should be available to any group of fishermen who believe they would be adversely affected; there should be restrictions on the transferability of licences in order to prevent undue accumulation of quota.⁽⁷¹⁾

OVERCAPACITY IN THE PROCESSING SECTOR

The implementation of the 200-mile limit in 1977 led not only to an increase in harvesting capacity, but also to a proliferation of fish plants. The number of federally registered fish plants in the Atlantic region grew from about 560 in 1978 to over 1,000 in 1991; the workforce in fish plants increased by 50%. Although fish processing plants do not put pressure on the resource directly, they add to the demand for raw material.

(70) The Canadian Council of Professional Fish Harvesters, *Creating New Wealth From the Sea: Canada's Professional Fish Harvesters and the Atlantic Fishery*, March 1995, p. 10.

(71) Round Table on Atlantic Fisheries, "Statements of Consensus," March 1995.

Inshore groundfish processing plants have typically been smaller-scale facilities, tending to operate on a seasonal basis and relatively labour-intensive. Offshore plants, on the other hand, have had substantial shore facilities and processing capacity, many being mechanized, with employment normally lasting for most of the year.⁽⁷²⁾ Some offshore plants have bought a proportion of their fish from the inshore. The inshore has tended to produce mainly fresh whole and filleted fish, and salted and dried products; the offshore mainly frozen fillets and blocks, with some fresh whole and filleted fish. Some offshore fish plants have had secondary processing for the manufacture of cooked and breaded products. The inshore has typically provided more jobs in fishing than the offshore but fewer jobs in fish processing.

One persistent problem in the industry has been the multiplicity of commodity exporters. As the resource rebuilds, markets will also have to be reclaimed; this will require a major change in the industry's traditional approach to marketing, that is to say a move toward developing a highly competent workforce and strategies for marketing premium groundfish products.

Overcapacity in fish processing has been sustained, in large measure, by provincial governments' succumbing to pressure to allow more individuals to qualify for federal Unemployment Insurance. Financial assistance of one form or another allowed capacity to expand during the late 1970s and again in the mid-1980s. Grants and subsidies also provided the basis for preventing or forestalling the closure of unprofitable facilities.

It is now accepted that there have been too many processing plants operating for too short a period each year. DFO economists have estimated that, for the period between 1980 and 1989, average excess capacity in fish processing ranged from a high of 44% in Prince Edward Island to a low of 28% in Quebec. Last fall, the federal and provincial governments failed to reach an agreement on reducing capacity in the processing sector.⁽⁷³⁾ The provinces have jurisdiction in this area, but have so far taken no action.⁽⁷⁴⁾

(72) Three integrated companies -- National Sea Products, Fishery Products International, and Clearwater Fine Foods -- have usually accounted for well over 50% of total Atlantic production.

(73) The plan had been for both levels of government jointly to implement Industry Renewal Boards (or IRBs, as recommended by the Cashin Task Force).

(74) The federal government licenses fishermen, while the provinces license processing facilities.

The Committee is aware that it is difficult for a province to adopt a reduction strategy without assurance that the same policies will be put in place in the other provinces. Some plants have been supplied by fishermen residing in neighbouring provinces, and not every province has the same amount of overcapacity. Members of the Committee nevertheless agree that the provinces should adopt a uniform strategy to reduce excess processing capacity, a policy that will reduce the number of plants. Highly seasonal, inefficient and under-financed facilities processing only groundfish and produce commodities, like cod blocks, cannot form the basis of a viable processing sector. Fish processing plants will have to process a variety of species, be able to produce for specialized markets and operate for longer periods.

Mr. Gilles Thériault suggested the following when he appeared before us:

The goal should be that the remaining plants can operate for a longer period of time. I believe goals should be set respecting the duration that processing plants should operate within a year. We should aim toward having all processing plants operating for a minimum of 25 weeks with incentives to increase the operation to 30 weeks within 5 years and to 40 weeks within 10 years. Any plant that does not operate for such a period should be considered surplus and encouraged to get out of the processing industry. No transfer of processing licences should be allowed if new owners of plants cannot show that they will operate for this suggested period of time... [We] have not seen the value-added products that we should have seen in the past 10 to 15 years in Atlantic Canada. As long as we have that many plants operating for 5 or 10 or 15 weeks, we will not see the value-added products that we should be seeing in our plants.⁽⁷⁵⁾

A related and especially contentious issue is the federal government's licensing policy, which is directed at separating the harvesting and processing sectors for inshore vessels under 65 feet LOA. Fishing licences in the inshore cannot be issued to companies involved in the processing sector, a policy which, processors have argued, impedes competitiveness.⁽⁷⁶⁾ Fishermen's organizations, on the other hand, strongly favour separation to give the harvesting sector more independence by

(75) *Proceedings of the Standing Senate Committee on Fisheries*, Issue No. 4, p. 11, 25.

(76) Some grandfathering provisions apply. Processing companies that already hold licences in this fleet may continue to do so, but they may not acquire additional licences.

allowing fishermen to bargain for a price that represents the real cost of fish,⁽⁷⁷⁾ it is commonly said that "fishermen should catch fish and processors should process."

On "fleet separation," Mr. Thériault, believed there should be room for fleet integration in the offshore (and perhaps, in some cases, in the midshore); otherwise, too much instability would be created because of the high volumes of catches involved. The witness also criticized the current policy of allowing fishermen to become plant owners while at the same time allowing them to keep their fishing licences, and suggested the following:

I do not think that this is necessarily the best situation because what you are doing in effect is replacing experienced processors with fishermen whose main expertise is harvesting and not processing fish. I think that it is important, if a plant owner is to develop his business, that he is confident that at least part of his supply is secure. Otherwise, how can he risk investing in such things as value-added products.⁽⁷⁸⁾

The President of the Fisheries Council of Canada (Mr. Ron Bulmer) stated that:

The current policy did not prevent the reverse vertical integration by successful harvesters back into processing. You need only look at the crab factory in the Gulf of St. Lawrence along the New Brunswick coast to see that the vast majority of crab processing plants are owned by fishermen. While plants could not own any more boats, there was nothing to prevent the boats from buying plants. It was a one-way, reverse policy.

... We feel that a level of further integration in licensing would be a major aid in balancing harvesting with processing capacity. To a great degree that can be achieved, and it would not require government money.⁽⁷⁹⁾

(77) In offshore ports, the "sellers" (fishermen) are employees of vertically integrated companies, that is to say processors with their own fishing vessels for meeting their raw material requirements. Offshore prices are said to be accounting (transfer) "prices" set to meet the internal corporate requirements. Inshore prices, on the other hand, are generally based on prevailing market prices (except in Newfoundland, where minimum prices are established through collective bargaining between processors and fishermen's unions). The fleet separation policy was introduced in the late 1970s to protect the interests of inshore fishermen; it was a response to a perceived imbalance of power.

(78) *Proceedings of the Standing Senate Committee on Fisheries*, Issue No. 4, p. 10.

(79) *Ibid.*, Issue No. 6, p. 4.

CONCLUSION AND RECOMMENDATIONS

A number of factors may have contributed to the severe decline in Atlantic groundfish: changes in the environment, such as unusually cold water temperatures; quotas set too high because of poor stock assessment or to accommodate social or other concerns; systematic over-fishing by foreign fleets outside Canada's 200-mile limit; seal predation; wasteful and destructive domestic fishing practices, such as dumping and discarding; harvesting small fish, etc. Although the reasons for the collapse are not well understood, when mercilessly over-harvested, fish stocks do become commercially extinct. Fishing effort, unlike factors affecting the marine ecosystem, is a variable that can be managed and regulated.

Most sectors of the industry would appear to agree with the following statements: that conservation must be kept at the forefront at all times; that without fundamental change, the fishery risks emerging from the current crisis in even worse shape than when it went in; that fisheries management policy has had no overall vision; that fishing must now be seen as a profession, with much more control in the hands of the practitioners; and that excess processing capacity must somehow be reduced. Despite this consensus, there is little real agreement on exactly how the industry should be rationalized or how it should look in the future. Essentially, there are two very different perspectives which are very much coloured by the long-standing (and still unresolved) debate about the economic, social, and environmental merits of small-scale, labour-intensive, individual vessel ownership *versus* larger-scale, capital-intensive, corporate ownership.

Proponents of the inshore place the blame for the demise of Atlantic groundfish stocks squarely on the offshore sector. They maintain that it is no longer valid to consider a specific and separate allocation of resources to the offshore, which should instead concentrate on fish processing, for which non-offshore vessels would supply most of the raw material. A phase-out of offshore technology is thus favoured by the inshore, especially of the large trawlers licensed and operated by vertically integrated companies. This approach would effectively eliminate the DFO's fleet separation policy by simply doing away with both licences for processor-owned trawlers and Enterprise Allocations. The inshore also points to the fact that the large vertically integrated companies were not profitable until they recently shifted away from harvesting to concentrate on processing imported fish

from other countries (e.g., Russia, Poland and China). To regard the fishery as a purely corporate and profit-oriented activity, the inshore argues, would have devastating social consequences.

Conversely, the large vertically integrated fishing companies emphasize the special role of the offshore in providing year-round employment at sea and in onshore fish plants, and in maintaining a year-round presence in fish markets. On this, the Fisheries Council of Canada favours an unfettered approach to harvesting fish in the future, one in which companies could fish their quota by the most efficient means possible (e.g., using any size of vessel, thereby doing away with the current fleet separation policy). The Council also proposes that property rights-based fisheries (quota licences) be implemented wherever this would improve harvesting efficiency.

What has been sorely lacking over the years is a larger, clear and consistent conception of what federal fisheries management policy should be accomplishing, and a strategy on how to achieve those objectives. On this, the Committee was told that the absence of such a framework makes it difficult for industry participants to discern the rationale for certain policies or regulations. Too many in the industry believe that issues -- especially those concerning licensing and fish allocation -- have been, over many years, resolved by political means in favour of the more well-organized and powerful industry groups.

As an integral part of an overall "vision" for the future Atlantic fishing industry, the Department of Fisheries and Oceans should formulate a set of well-articulated primary or guiding principles. Specific management decisions and regulations should be tested against this larger framework. Ideally and logically, the vision should precede further adjustments to the industry. It should address the thorny question of whether fishermen should be catching large quantities of fish in a technology intensive fishery or, alternatively, relatively smaller amounts in a more labour-intensive industry.

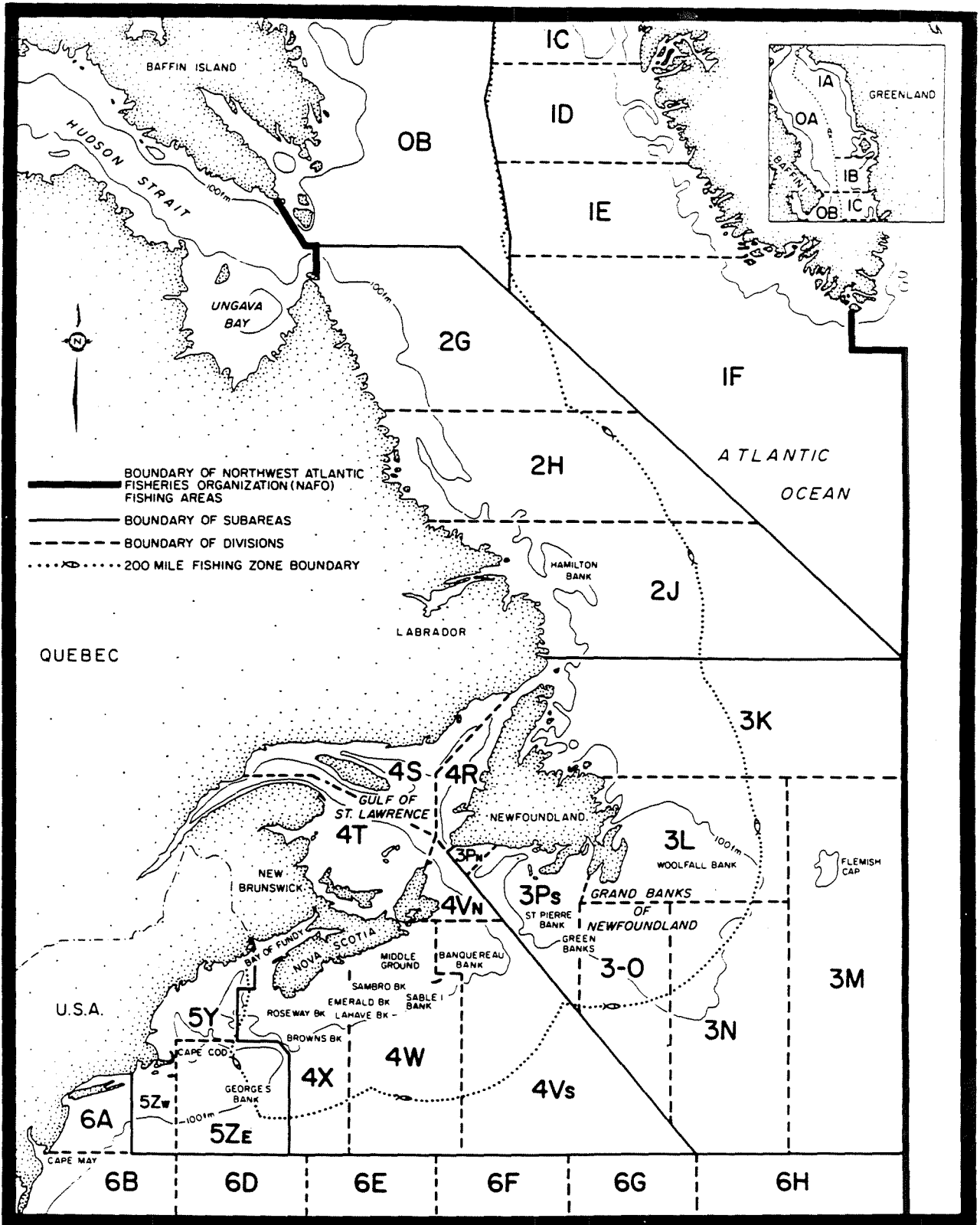
The growth in the international seafood trade over the last decade has led to an appreciable increase in prices and to a decline in availability. Once regarded as the "protein of poor people," fish has become a food for those who can afford it. Any new framework should somehow ensure that, in the future, the resource generates fair incomes and a reasonable level of self-sufficiency for "the many" in the industry, not just to "the few" in the form of corporate dividends. Those communities and families in the region whose livelihoods have for generations depended on the fishery expect and deserve no less.

The larger framework for the future should be used to guide policy-makers. Decisions on fish allocation and licensing, property rights in the harvesting sector, professionalization and training, capacity reduction in fish processing, fleet separation, appropriate fishing methods, etc. should comply with the larger vision.

1. **The Committee recommends that conservation of the marine environment and its resources always have priority over all other considerations. Policies concerning fish allocation and licensing, enforcement, harvesting practices, etc. should, without exception, always be proven to be environmentally sustainable. This principle should apply at all times, even when fish stocks are abundant. In the future, fishing gear and fishing techniques should be thoroughly evaluated before being introduced on a commercial scale.**
2. **The Committee recommends that the Department of Fisheries and Oceans issue a clear vision statement and an explicit statement of fundamental and guiding principles for managing the Atlantic fisheries, including clearly expressed objectives with respect to employment in coastal communities.**
3. **The Committee recommends that inshore fisheries have priority access to the resources upon which they have traditionally relied. The rules for re-opening fishing grounds should clearly stipulate that in the case of groundfish usually harvested by both the inshore and offshore sectors, no offshore harvesting take place until the inshore has fully recovered. Offshore fisheries for groundfish should be permitted to resume only after a thorough consultation with inshore fishermen.**
4. **The Committee recommends that the fishery of the future be premised on participants' diversification of their fishing activities. The licensing system (e.g., licence transfer policies) should promote multi-species, rather than single-species operations.**

5. The Committee recommends that the Department of Fisheries and Oceans review and assess the effectiveness of its regulations for restricting the ownership or control of Individual Transferable Quotas to certain maximum limits.
6. The Committee recommends that federal and provincial governments move to develop a joint and coordinated strategy to address the issue of excess processing capacity: the number of fish processing plants in the region should be reduced and the number of processing weeks for plants remaining in operation should be increased. The strategy could be based on the principle that reduced capacity in fish processing would not reduce historic provincial catch shares. In future, fish plants will need to become better equipped in producing value-added products.
7. The Committee recommends that the Department of Fisheries and Oceans further promote the participation of fishermen in fish stock assessment and in carrying out various fisheries research activities. In future, the Department should recognize the value of the anecdotal knowledge of coastal fishermen.
8. The Committee recommends that fishermen play a greater role in decision-making through a genuine and effective system of co-management and partnership with government. Access to the fishing profession should be limited to *bona fide* participants. The fishery should be delegated more power to regulate itself (e.g., in regard to professionalization, the admission of fishermen to the profession).
9. The Committee recommends that the Department of Fisheries and Oceans develop ways to communicate policy and new policy initiatives more effectively to fishermen and their organizations. Coastal communities affected by federal government decisions should be thoroughly consulted. The federal government should also move to counter the perception, widely held by the Canadian public, that the Atlantic fishery is a burden on the national economy.

Subareas and Divisions of the NAFO Convention Area



Source: Department of Fisheries and Oceans.

WITNESSES

ISSUE No.	DATE	ORGANIZATIONS AND WITNESSES
1	Tuesday May 31, 1994	Department of Fisheries & Oceans Ms Maryanone Flumian Assistant Deputy Minister Policy and Program Planning Department of Human Resources Development Mr. François Pouliot Associate Deputy Minister Mr. Norman St-Jacques Director General and Team Leader Task Force on Atlantic Fisheries
2	Wednesday June 8, 1994	Mr. Richard Cashin Task Force on Incomes and Adjustment in the Atlantic Fisheries
3	Tuesday, June 6, 1995	Department of Fisheries & Oceans Dr. William Doubleday Director General Fisheries and Oceans Science Directorate Mr. Mark Mueller, Director Structural Adjustment Programs Industry Renewal Mr. Wayne Follett, Director Program and Coordination and Economics Branch Newfoundland Region
4	Tuesday, June 13, 1995	Mr. Gilles Thériault, President of GTA Consultants Inc.

Witnesses (cont'd)

5 Tuesday, June 20, 1995

Mr. Gary W. Dedrick
Executive Director
Southwest Nova Fixed Gear
Association and President of the
Eastern Fishermen's Federation

Mr. Sam Elsworth, Director
Eastern Fishermen's Federation

6 Tuesday, October 26, 1995

Fisheries Council of Canada
Mr. Ron Bulmer, President

7 Tuesday, November 7, 1995

**Department of Human
Resources Canada**
Mr. Marcel Nouvet
Senior Director General
Human Resources Investment Branch

Department of Fisheries and Oceans
Mr. Pat Chamut
Assistant Deputy Minister
Fisheries Management

Mr. Karl Laubstein, Director General
Industry Renewal Boards