

# SETTING A NEW COURSE

## Phase II Human Resources Sector Study for the Fish Harvesting Industry in Canada



Prepared for: Canadian Council of Professional Fish Harveters  
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## FOREWORD

The Canadian Council of Professional Fish Harvesters is pleased to release *Setting a New Course*, the first major study to deal exclusively with the economics and human resources needs of Canada's independent owner-operator fishery.

This is also the first time that a major study of this nature has been carried out on behalf of the owner-operator industry itself.

Never before has the owner-operator fishery been examined in such detail or from this perspective. This study is long overdue. The owner-operator fishery is the largest and most productive sector of the fish harvesting industry; it lands the most valued products and provides the economic foundation for more than 1300 coastal and inland communities in Canada, and deserves special attention.

Two decades ago the Canadian fishery depended on a narrow range of species and competed for market share against low cost meats like poultry and pork products. Today seafood is a high-value product. Canada's owner-operator fish harvesters run sophisticated enterprises which supply top quality products to the world market.

But all is not well with the independent owner-operator fishery. As our study shows, the very foundation of the independent owner-operator approach to harvesting the country's marine resources is being threatened by the concentration of control over fishing licences, often by surreptitious means. In the Pacific, the absence of an owner-operator policy has brought the independent fishing sector to the brink of extinction. If no action is taken, young people, who are the future for our coastal communities, will not be able to enter the fishery as their predecessors did and hope to one day own and operate their own enterprises. Left unchecked, this trend will undermine the economic future of many communities that depend on the owner-operator fishery for a stable source of jobs and investment.

Our Council does not want this to happen.

The issues raised in this report are serious and complex. They strike at the core of what is happening in rural, coastal Canada and demand equally serious and sophisticated responses aimed at revitalizing coastal communities.

Our Council and its member organizations will now undertake a strategic planning process that will address the findings of the report. We look forward to engaging with the Federal Government and the governments of the fishing provinces to develop the range of mutually supportive policies that will be required to put the independent owner-operator fishery and the communities that depend on it back on a sustainable footing.

The time to act is now...before what we have is gone.



Earle McCurdy  
President

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My sincere thanks to all of these contributors to the project,

Rick Williams  
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\*NOTE: The appendices can be found electronically on the CD-ROM

# EXECUTIVE SUMMARY



## INTRODUCTION

The fishing industry in Canada provides employment for some 40,000 harvesters and 30,000 processing workers. In 2003, it generated approximately \$2.2 billion in landed value and \$4.5 billion in export value.<sup>1</sup> The great majority of the economic impacts occur in coastal-rural regions that often lack other sources of employment and wealth generation.

This report presents findings and conclusions drawn from four years of research on the fish harvesting labour force in Canada. The research began with a “situational analysis” study to assess the size, structure and economic impact of the industry. A national “sector study” was then carried out to fill in gaps in available knowledge and to generate new data on human resources trends and issues in the industry.

Together these research activities have generated more information than has ever been available before about the Canadian fish harvester labour force as a whole and the challenges it faces. The studies provide the knowledge base for a national human resources strategic plan to guide the efforts of government and industry stakeholders in their efforts to ensure that the industry has the skilled labour force it needs now and in the future.

## Project Overview

This research was carried out by the Canadian Council of Professional Fish Harvesters (CCPFH) with support from Human Resources and Skills Development Canada. The objectives of the second phase of the research, the national Sector Study, were:

1. To assess current and future demand and supply trends for skilled labour in the fish harvesting industry;
2. To identify and analyze constraints on the capacity of the industry to meet the changing demand for skilled labour;
3. To identify changes in the mix and levels of skills required of the labour force and constraints on ongoing acquisition and updating of these skills; and
4. To recommend appropriate policy and programmatic responses to address the issues and challenges associated with current and future demand for skilled labour to the industry.

The Sector Study included the following research components:

- An updated profile of the fish harvester labour force makes use of data from the 2001 Census;
- Telephone surveys of over 1,200 enterprise heads and 600 crewmembers in the Atlantic Provinces and Québec, and of 300 enterprise heads and 170 crewmembers in British Columbia;
- Key informant interviews and consultation with harvester leaders, DFO managers and other knowledgeable stakeholders;
- Focus groups & workshops with industry leaders;
- International study tours and a literature review;
- Financial analyses to understand the market and non-market factors influencing licence values and enterprise viability trends;
- Community case studies to examine the impacts of trends in the fishing industry on fisheries-reliant coastal regions.

The research was conducted over the period of October 2003 to February 2005, and was carried out by PRAXIS Research Inc. The project was overseen by the Project Advisory Committee with representation from harvester organizations, academic researchers, independent experts, the Department of Fisheries and Oceans (DFO) and HRSDC.

<sup>1</sup> These statistics are from 2001 Canada Census data and from 2003 fisheries statistics provided by the Department of Fisheries and Oceans.

## Industry Overview

Community-based, owner-operator enterprises now make up the largest and most productive sector of the fish harvesting industry in Canada. Such enterprises hold licences and quotas in the most valuable fisheries where they generate some 70% of total landed value. The industry is a key contributor to the social and economic stability of more than 1,000 coastal communities.

This study examines the changing economics of the industry and assesses its current and future human resource needs. It has generated convincing evidence that the small business foundation of the industry is under severe stress. Shifting and sometimes inconsistent fisheries' management approaches and dramatic changes in markets for fishing licences and quotas are rapidly undermining the owner-operator fishery and the social and economic sustainability of coastal communities.

The research findings point to the need for a renewed public policy commitment to the independent owner-operator fishery. Such a clear and comprehensive policy direction would appear to be critical to the future availability of a skilled fisheries labour force, and to the survival of the coastal communities that generate and sustain that labour force.

### Definitions

*The Fleet Separation Policy applies to fishing vessels less than 65' in length and separates the harvesting and processing sectors. It does not recommend the issuance of new inshore licences to corporations, including processing companies.*

*The Owner-Operator Policy applies to licence holders using vessels less than 65' long. It requires licence holders to be present on their vessels and personally fish their licences.*

*From A Policy Framework for the Management of Fisheries on Canada's Atlantic Coast, DFO, 2004; pp 43-44.*

fishery in Atlantic Canada almost exclusive control of near-shore fisheries for lobster, crab, scallops and other species. By the late 1990s, these fisheries were the most valuable component of the fishing economy providing employment for a large rural labour force in widely dispersed coastal communities.

In the Pacific Region, where Fleet Separation and Owner-Operator Policies were not put in place, the owner-operator sector of the fishery has not fared nearly as well. Declining access to the salmon fishery, a sharp fall in salmon prices, due in part to competition from farmed fish, and a series of DFO management measures aimed at fleet rationalization have dramatically reduced employment opportunities and the overall prospects for owner-operator fleets.

## The Market For Access Rights

The introduction of limited entry licensing in the 1970s meant that licences acquired a market value. Prices for many species licences have surged in recent years with the increased commercial value of seafood products. A major purpose of this study has been to determine the impact of rising licence prices on owner-operator fleets.

## A Tale Of Two Coasts - The Changing Economy Of The Fishery

The total volume of fish landings on both the Atlantic and Pacific coasts is now close to levels of the mid-1970s after sharp declines in the 1990s. However, on the Atlantic Coast the species composition of the total catch has shifted dramatically from groundfish to shellfish, and the economic value of the fisheries has increased significantly. On the Pacific Coast, the total landed value for fisheries has seen only limited growth since the 1990s, reflecting both reduced landings and changes in market conditions.

In the Atlantic, the shift from groundfish to higher value shellfish has primarily benefited owner-operator fleets. This occurred because of the Federal Department of Fisheries and Oceans' (DFO) licensing policies that were put in place after Canada extended its fisheries' jurisdiction to the 200-mile limit in 1977. DFO's Fleet Separation and Owner-Operator Policies gave the independent, community-based

### Definitions

*Licence stacking:* A harvester buys or leases additional licences and “stacks” them on his/her vessel. This is usually done because each licence brings with it more fishing time or more access to the resource.

*Licence leasing:* A licence owner stops active fishing and leases the licence to another harvester. DFO rules in Pacific Region also allow fish processing companies to own multiple licences and to lease them out to harvesters.

*Quota leasing:* In fisheries managed under individual quota shares, quota owners can choose to lease quota to other harvesters instead of fishing themselves.

*Leasing Costs:* The research indicates that leasing costs for licences and quota are often in excess of 50% of the value of the fish caught with the licence.

The research evidence shows that there has been substantial upward pressure on licence prices generated by “special interest purchasers”, i.e. investors who are not constrained by the need to finance the purchase, and carry the debt cost, strictly on the basis of the revenues generated by fishing the licence. Such purchasers include fish processors who are looking to guarantee resource supplies to their plants, more affluent harvesters who want to “stack” licences on a boat to build a multi-licence business or to make money from leasing licences, and investors who are merely speculating on the future value of licences. Another important factor is government buying licences for capacity reduction or treaty settlement purposes. The combined activities of such investors create much greater demand for licences and this drives prices up. This, in turn, creates substantial financial barriers for crewmembers and new entrant harvesters who want to become independent owner-operators.

This issue manifests itself in different ways in different fleets and regions. In the Pacific Region, DFO policy facilitates stacking, speculative purchases and non-harvester ownership. In the Atlantic, despite the policy restrictions on licence stacking and vertical integration of processing and harvesting operations, the practise has not been curtailed.

The research also indicates that higher licence costs and the erosion of owner-operator control are also having a negative impact on conservation and orderly management. There is credible information that increased cost pressures on some harvesters are fuelling an underground market for several high value species. Such trends undermine orderly management, draw vessel operators into extra-legal behaviour and reduce tax revenues to government.

### The Processor Perspective

There is a fundamental difference of interest between processors and harvesters in many Canadian fisheries. Processors are experiencing intense competitive pressure due to shortages of raw material supplies in many key species and the emergence of China as a dominant global player in seafood processing and marketing. Some see vertical integration as key to being able to survive in this environment. Some key processor interests in Atlantic Canada have pushed for the elimination of the Owner-Operator and Fleet Separation Policies so they can reduce raw material costs and have more secure access to resource supplies.

Not all processors share this view. Representatives for independent processors in Nova Scotia insisted that they could not afford to pay the current market prices for licences even if they were allowed to buy them. Their view is that only companies that are already vertically integrated can afford such price levels. They called for a strict enforcement of fleet separation, including not allowing harvester interests to own and operate processing facilities, as the best way to level the playing field.

The findings of this study, including international comparisons, suggest that the tensions between the harvesting and processing sides of the overall fishing industry are deeply entrenched and persistent, and will likely grow as demand for seafood products strengthens and resource supplies remain stable or perhaps shrink.

### The Emerging Labour Force Crisis

The bulk of the evidence generated by this study supports the conclusion that the industry is entering a period of great change, if not

crisis, in terms of the sustainability of the labour force. There are four major drivers behind these trends: demographics, the changing status of crewmembers, reduced fishing opportunities, and rising licence costs.

The fishery labour force is aging. Close to 40% of current enterprise heads will retire from the fishery over the next decade. There are fewer people coming through the industry to take the place of retiring captains and the fishing crew labour force is also older than the Canadian labour force in general.

Economic trends in many parts of the industry have negatively affected crewmembers the most. Incomes have stagnated for the crew labour force overall, in part because of shorter working seasons and the greater financial pressures on enterprise owners.

Reduced fishing opportunities have an added implication: in an industry where most of the training takes place on the job, the reduction in fishing time not only limits employment opportunities but also makes it more difficult to attract and train new entrants. In many fleets, young people no longer have opportunities to “grow up in the fishery” as was the case for most of the current labour force. Higher licence prices mean less chance of pursuing careers as owner-operators.

The research provides substantial evidence of the essential role played by community and family in the ongoing renewal of the fisheries labour force. The majority of new entrants get jobs in family or community businesses, and the majority of those who became enterprise heads do so by taking over a family-owned or community-based enterprise.

To the extent that the fishery labour force shrinks, or market pressure disrupts the traditional patterns of inter-generational transfer of fishing equity, this system of labour force recruitment and professional preparation will break down. As families lose control of fishing assets these will tend to become more concentrated in the larger centres, taking jobs and future economic benefits away from coastal communities. This process is already well advanced on the Pacific Coast.

The emerging crisis in the fishery labour force is both a contributor to, and a result of, wider socio-economic and demographic trends in coastal-rural regions. The loss of fishing employment and incomes contributes to local decline, but rural communities in general, face growing difficulties holding onto young people who are staying in school longer and leaving to seek better paying, year-round jobs in urban areas. Young people have attractive careers options to choose from and will not stay in fishing if the industry is not on a par with other occupations in terms of incomes and secure futures. Employers in both fish processing and harvesting are now reporting difficulties finding and retaining workers, a problem that few had to face in the past.

### **The Unique Challenges In The Pacific Region**

One overarching finding of this study is that the fisheries’ labour force in the Pacific Region faces challenges of a different order of magnitude entirely than is the case for the Atlantic coast.

The policy approach in the Pacific Region of DFO has contributed to the concentration of ownership of licences and quotas in the Vancouver-Richmond-Victoria region leaving many coastal-rural communities without control of, or access to, adjacent resources. Fisheries’ employment is shrinking rapidly in remote coastal regions, and this is seen to contribute significantly to the patterns of economic breakdown, particularly for youth, in First Nations communities.

The other striking aspect of the current situation in the Pacific Region is the lack of partnership and cooperation both among industry groups and between many industry groups and DFO. There are issues and tensions in all DFO regions, but the situation in British Columbia appears to be unique in terms of the lack of effective mechanisms for dialogue and consensus building for policy development and fisheries’ management.

The study identifies an acute crisis of sustainability for the fisheries' labour force, and for fisheries-reliant communities in British Columbia.

### **The New Fishery –The Trend Towards Self-Management**

DFO restructuring, cost cutting and policy renewal have increasingly transferred fisheries' management roles and responsibilities to industry through co-management agreements and other arrangements. This trend is also extending into health and safety as other government departments and agencies (e.g. Transport Canada and Provincial Workers' Compensation Boards) increase their regulation in these areas.

The study identifies three distinct approaches for government-industry interaction: the traditional "top-down" model where government sets the standards and enforces them (more or less effectively), the "contracted services" model where government sets the standards and private sector agencies deliver the services with varying levels of accountability to industry groups, and the "professional self-determination" model where government negotiates agreements on management targets and objectives with democratic industry organizations, and the organizations themselves oversee implementation and are accountable for results.

The report documents innovative ways in which harvester organizations in different parts of the country are working creatively with government regulators to take control of their situations through professional self-determination. It concludes that fish harvesters will increasingly need the knowledge and skill sets and the organizational capacities associated with this approach to prosper in this new environment and that these attributes will, in future, be as integral to the identity of fish harvester as handling vessels and catching fish at sea.

### **Renewal Of Professionalization**

The report reviews the state of fish harvester professionalization initiatives across the country. Newfoundland & Labrador and Québec have professionalization regimes in place that include mandatory training and certification linked to DFO licensing standards. Other regions are developing alternative models that reflect different industry structures and relationships among fleet sectors. It is unlikely that the Newfoundland and Québec models will be replicated in other regions.

In their public pronouncements, DFO and the provinces are in favour of improved training and certification for fish harvesters and professionalization is widely considered a "good thing". In practice, however, there is a lack of policy support and of proactive efforts to move things forward in the face of the pockets of resistance in the Maritimes and British Columbia.

The report concludes that there is a compelling need for DFO to bring forward its long-awaited policy document on professionalization, to spell out the conditions under which the Department will withdraw from the fish harvester registration function in regions still without professionalization regimes, and to define the regulatory mechanisms for integrating experience and training standards established by industry-led certification boards with the fisheries' licensing system.

### **New Approaches To Professional Status**

The report suggests that shorter fishing seasons on both coasts and limited fishing opportunities may require some new thinking about professional status. Professional harvesters who earn significant incomes in short fishing seasons may still have time during the year when they could find productive employment based on their skills in areas such as engine repair, carpentry, hydraulics, use of navigation and communication technologies, etc. Such an approach may be of increasing importance, given that in many coastal-rural regions there are growing shortages of skilled tradespersons due to out-migration and the aging workforce.

The report proposes that more work be done to explore options to encourage "occupational diversity" in ways that are not counter to the basic objectives of fish harvester professionalization.

### **Emerging Education And Training Priorities**

Telephone surveys, industry workshops and focus groups conducted as part of this study, generated much useful information on fish harvester attitudes and experience with regard to training. The emerging training priorities as identified by harvesters are: small business management, stock assessment and other scientific research, and capacity-building for self-management in conservation, stock and habitat enhancement, fleet management and health and safety.

Close to 40% of captains and over 60% of crewmembers expressed interest in taking some form of fisheries training if it was accessible and affordable. The level of interest is more notable given the age profile of captains and the fact that up to 40% of them will retire within 10 years.

The report concludes that there is sufficient interest to build training programs for the industry given the right mix of programs and supports for participation.

### **The Commitment To Owner-Operator Fisheries**

If not constrained and directed by clear public policy objectives, the evidence generated by this study suggests that market forces will rapidly move the industry towards concentration in ownership and geographical location of fishing licences. In countries or regions where such processes are advanced, the consequences for fisheries-dependent communities, and for the rural-based fisheries' labour force, have been far-reaching and predominantly negative. The sharp contrast presented in this report between Canada's east and west coasts provides the most compelling evidence to support this view.

The research findings in Canada and in other fishing nations indicate that the sustainability of community-based, owner-operator fisheries requires a public policy commitment that is clear, comprehensive and effectively enforced. There are interesting policy models in the United States, Norway, France, the United Kingdom, Ireland and the European Union. The most explicit policy framework that was encountered, however, was the current licensing system in Atlantic Canada based on the Owner-Operator and Fleet Separation Policies.

An important lesson learned from the international comparisons, however, is that the effective development and "sheltering" of owner-operator fisheries may require a wider range of policy tools in the fisheries management field and beyond. These include financial supports for intergenerational transfer of fishing assets, more effective taxation policies, regional/rural development services, and specialized education and training programs.

In short, no one policy instrument within the fisheries management system will ensure the sustainability of community-based owner-operator fisheries. The situation calls for a more comprehensive and integrated approach that reaches across government departments and federal/provincial jurisdictions.

To establish a common policy vision and to coordinate policies and programs, the Government of Canada, in partnership with fishing provinces, will need to establish clear and coherent goals for the future of community-based owner-operator fisheries and put in place specific policy and program instruments to achieve these goals.

Given the nature of the industry and the current allocation of legislated authority, the initiation of such a policy vision should be led by the Minister of Fisheries and Oceans.

# 1 PROJECT OVERVIEW



## 1.1. OBJECTIVES OF THE STUDY

This report presents a summary of findings and conclusions from the Phase II Human Resources Sector Study for the fish harvesting industry in Canada.

The Phase I study was completed in 2001.<sup>1</sup> It drew upon available data and secondary sources to describe and analyze the current structure of the Canadian fish harvesting industry and the dominant trends impacting the harvester labour force. It also identified gaps in available knowledge and recommended new research activities to fill those gaps.

The Phase I report was entitled *Taking Our Bearing* reflecting its primary focus on the examination of current conditions and the collation of available knowledge. This report is entitled *Setting a New Course* because it draws upon new research findings to propose policy and program options and to support informed decision-making on future directions and actions.

The overall purpose of a human resources development sector study is to provide critical data and analytical resources for the development of a national human resources strategic plan. The assumption is that the findings from this study will, in future, be fed into a planning process led by the national sector council for the industry (i.e. the Canadian Council of Professional Fish Harvesters [CCPFH]), and involving the lead agencies for professionalization in the regions, the training institutions and other stakeholder groups and agencies.

The specific objectives for this study are:

1. To assess current and future demand and supply trends for skilled labour in the fish harvesting industry;
  - The fish harvester labour force is comprised of enterprise heads (i.e. fishing captains or “skippers”) and crew working on fishing vessels.
  - The crew population is further sub-divided into apprentice captains (i.e. those who intend to become enterprise heads in the future) and professional crewmembers.
2. To identify and analyze constraints on the capacity of the industry to meet the changing demand for skilled labour;
3. To identify changes in the mix and levels of skills required of the labour force and constraints on ongoing acquisition and updating of these skills; and
4. To identify appropriate policy and programmatic responses to address the issues and challenges associated with current and future demand for skilled labour to the industry.

## 1.2. STUDY ELEMENTS & METHODS

This study has involved the following research activities and methodologies.

### 1.2.1. Profile of the Fish Harvester Labour Force

The Phase I sector study report included a comprehensive review of secondary data sources to describe the fish harvester labour force. Subsequent to the completion of that study, the data from the 2001 Canada Census became available. This current project uses the newer Census data to generate a more up-to-date profile of the fish harvester labour force in terms of size, occupational makeup, age profile, employment status and activity patterns, educational attainment, gender, mobility and other variables. The data also supports provincial and sub-regional breakdowns and 10-year trends.

<sup>1</sup> *Taking Our Bearings: Situational Analysis of Canada's Fish Harvesting Industry*, a report prepared by PRAXIS Research & Consulting Inc. and GSGislason & Associates Ltd., for the Canadian Council of Professional Fish Harvesters, Ottawa, October 2001.

### 1.2.2. Telephone Surveys

Telephone surveys were conducted with statistically significant sample populations of fish harvesters in four categories:

- Enterprise heads in the Atlantic Provinces and Québec (1,205 completed survey interviews);
- Crewmembers in the Atlantic Provinces and Québec (600 completed survey interviews);
- Enterprise heads in British Columbia (300 completed survey interviews); and
- Crewmembers in British Columbia (171 completed survey interviews).

The survey questionnaires generated data on strategic topics including:

- Licences and quotas held by enterprises;
- Total earnings per enterprise from sales of fish;
- Intentions of enterprise heads regarding retirement and sale or transfer of licences;
- Anticipated market prices of enterprises, licences and other fishing assets;
- Intentions of crewmembers with regard to becoming enterprise heads;
- Perceived barriers to inter-generational transfer of fishing licences; and
- Experience and interest in training.

The surveys were conducted in the spring and fall of 2004.

### 1.2.3. Key Informant Interviews & Consultations

To generate in-depth and expert input on the key issues addressed in the study, interviews were held in each of the four Atlantic and Pacific DFO regions with the following categories of key informants:

- Senior fish harvester leaders;
- Fish processor representatives;
- Independent fisheries experts (academics or professional consultants);
- Senior DFO managers; and
- Senior fisheries officials in provincial governments.

For freshwater and Arctic fisheries' interviews were held with appropriate provincial or territorial fisheries managers and industry leaders.

All interviews were conducted with pre-tested interview guides.

### 1.2.4. Focus Groups & Workshops

Facilitated focus groups were conducted with representative groups of fish harvesters in each DFO Region on the Pacific and Atlantic coasts. The agendas centred on sharing of initial findings from the telephone surveys and discussion of their implications with particular regard to inter-generational transfer of licences.

The study also benefited greatly from the participation of the consultants as facilitators and presenters in meetings and workshops with industry leaders and other stakeholders. Most of these sessions included a review of findings from the study and discussion of implications and policy options. These included:

- A national workshop on training and regulatory change in the field of health and safety;
- Five workshop sessions with fish harvester leaders in British Columbia to develop analytical perspectives and policy options specific to the Pacific Region. These included three multi-stakeholder policy workshops and two sessions with the Board and other members of the British Columbia Council of Professional Fish Harvesters;
- Three workshops with the CCPFH National Expert's Committee on Fisheries Management addressing issues of policy renewal and capacity building in harvester organizations;

- A research and policy analysis workshop with the Nova Scotia Coastal Communities Network;
- A national conference of regional fish harvester professionalization boards and councils;
- Two planning workshops with the CCPFH National Working Group on Professionalization with the participation of the regional certification boards and professionalization leadership groups;
- A workshop with the Executive of the CCPFH to review findings and develop policy options;
- A presentation of findings and policy workshop with francophone harvester groups; and
- Two meetings of the Project Advisory Committee made up of fish harvester leaders, DFO and HRSDC representatives and academic experts.

### **1.2.5. International Comparisons & Literature Review**

The project included examination of policy and program options for fish harvester professionalization, and for facilitation of inter-generational transfer of assets, in countries that are facing comparable human resources challenges in their fish harvesting industries. This research included study visits to France, Norway, Scotland and Ireland. The consultants were privileged to attend a major European Union conference in Ireland on renewal of the Common Fisheries Policy.

In addition to the study visits, the work included a review of the literature and follow-up telephone interviews with appropriate experts on policy trends and options in the United States, and a literature review on fisheries policy trends in New Zealand and Australia.

### **1.2.6. Financial Analyses**

A major focus of the study is the financial aspect of inter-generational transfer of fishing assets. There is an overarching concern that rising prices for fishing licences and quotas will mean that many of the new enterprise heads who buy these licences will not be able to sustain their businesses.

Key objectives of this component of the study were:

- To understand the market and non-market factors that are influencing licence values;
- To identify and evaluate options to make it easier for qualified new entrants to acquire the financial support they need to take over enterprises at fair market values; and
- To look at tax changes, legal mechanisms and other options to improve overall business viability in fishing fleets for current and future owner-operators.

The methods employed in this project component included case studies of individual fishing enterprises to establish costs and earnings profiles and fair market value estimates. There was also an examination of current tax policies impacting the sector and of strategies and options for financing transfers of fishing assets. Specific outputs from this element of the project include an analysis of business viability thresholds for fishing enterprises, a tool for assessing the fair market value of fishing enterprises, and legal advice on incorporation of fishing enterprises.

### **1.2.7. Community Case Studies**

A critical goal of the study is to understand the impacts of changes in the fishery on the coastal communities that support the maintenance and regeneration of the labour force. To this end, case studies were carried out in seven coastal-rural regions representing different types of fisheries and divergent trends in resource availability. The case study regions were:

- Burin Peninsula in Newfoundland;
- Lobster Fishing Area 34 (Digby, Yarmouth and part of Shelburne counties) in Nova Scotia;
- Lobster Fishing Area 25 (Southeast New Brunswick);
- Les Îles de la Madeleine in Québec;

- The freshwater fishery in Manitoba;
- Nunavut; and
- The Prince Rupert region in British Columbia.

The methodology for the case studies included three elements:

- Review of available research literature;
- Interviews with key informants; and
- Analysis of Census Canada data for the specific regions.

### **1.3. STRUCTURE AND PURPOSE OF THIS REPORT**

This report presents a summary and synthesis of findings from all the research components described above, together with analytical conclusions.

The bulk of the evidence to support these findings and conclusions is presented in separate reports for each of the study components – the surveys, interviews, case studies, etc. The reader is referred to those reports for a more complete understanding and rationale of the findings and conclusions presented below.

## 2 SUMMARY OF FINDINGS



### 2.1. LABOUR FORCE OVERVIEW

It is a continuing challenge in this research to estimate with certainty the size of the fish harvester labour force. There are different ways to categorize and count industry participants, each of which produces different results. The following table presents data from the 2001 Census, from the registration of harvesters by DFO and provincial agencies, and from the Federal Government tax filer data.

TABLE 1: NUMBER OF FISH HARVESTERS, 2001

<b>1 Census</b>	
• Total population	43,385
• Total labour force	37,465
• Employed labour force	26,620
• “Self-employed fishermen” as an estimate of owner-operators of fishing enterprises	11,455
<b>2. Fisher Registrations (DFO)</b>	
(including estimate of Inland Fishermen and provincial registrations in Québec and Newfoundland & Labrador)	61,000
<b>3. Tax Filer Data:</b>	
Total reporting net income from fishing	35,800
Major source of income from fishing	24,460

The following observations arise from this data:

1. There are approximately 25,000 individuals in the core labour force of professional harvesters, i.e. individuals who derive most of their income from fishing.
2. There are perhaps as many as 10,000 additional harvesters who earn significant income from fishing on a part-time or seasonal basis.
3. There are a large number of marginally attached or inactive individuals who register from year to year to maintain their fishing privileges, but for whom fishing is not a significant activity or source of income. This group represents a reserve of labour that might flow back into the industry should employment opportunities expand.

Canada Census data suggest that employment in Atlantic Canada’s fishery has been relatively resilient despite the collapse of groundfish stocks in the mid-1990s. In the Pacific Region, there has been a sharp and continuing decline in fishing employment, and a much less positive labour force profile.

The employed fish harvester labour force in Canada dropped from 32,415 in 1991 to 26,620 in 2001, a decline of 18%. The employed labour force in British Columbia shrank by 41% over the same period. In Newfoundland & Labrador and Nova Scotia, the two provinces that bore the brunt of the groundfish collapse, employment dropped by 20% in these two provinces combined.

Among the three occupational categories of fish harvesters described by the Census, the number of “deckhands” in the labour force dropped 37% versus declines of 17% for “fishing masters/officers” and just 6% for “fishing vessel skippers and fishermen/fisherwomen”. Incomes for deckhands also failed to keep pace – falling from 84% of the overall average for fish harvesters in 1991 to 77% in 2001.<sup>2</sup>

Most fish harvesters experienced income improvements, especially those in Québec and Newfoundland & Labrador. In 2001 average

<sup>2</sup> The Census data on deckhands needs to be treated with some circumspection. It is evident that a significant proportion of harvesters who are recorded as “fishing vessel skippers and fishermen/fisherwomen” are in fact crewmembers, and that some individuals change categories from one Census to the next.

earnings for masters/officers and skippers/fishermen in the three Maritime Provinces exceeded average earnings for the labour force as a whole in those provinces. On the West Coast, however, average incomes for masters/officers and skippers/fishermen were more than 20% lower in 2000 than in 1990. The number of fish harvesters working 13 weeks or less increased by 30% on a national basis, but in the Pacific Region, it rose more than 70% over the decade while the number working 14 to 26 weeks fell by 60%.

Fifty-seven percent of fish harvesters (compared to 20% of the labour force as a whole) had less than high school graduation in 2001. The proportion of harvesters with trades, college or university diplomas/certificates increased from 17% in 1991 to 23% in 2001. In the Atlantic Region, the number of fish harvesters with certificates or diplomas increased by 40%.

The overall picture of the Canadian fish harvester labour force that emerges from the Census data is sharply split by regions. The East Coast fishery shows signs of having stabilized after the groundfish crisis. On the West Coast, the labour force trends are almost all negative – a shrinking harvester population, reduced employment, sharp reductions in average weeks of work and an older age profile. These trends have particularly serious implications for coastal communities that depend on the fishery in British Columbia.

## 2.2. FINDINGS FROM SURVEYS

This section presents the most salient findings from the survey research from the perspective of the core concerns of the study: the current and future supply of skilled labour and the dynamics of inter-generational transfer of assets.

The separate reports on the survey research present technical details on the survey populations and the levels of statistical accuracy.

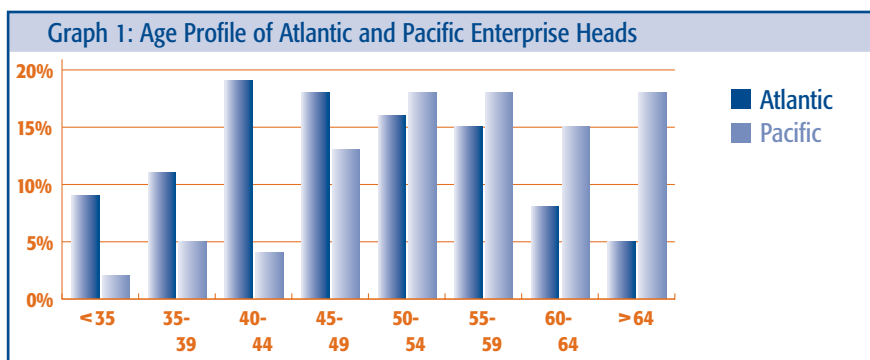
### 2.2.1. Demographic Trends

According to the Census, the average age of participants in the Canadian labour force overall was 37 years in 2001. Data from the surveys suggest that the fish harvester labour force is older overall, and significantly older in the case of captains or enterprise heads. The relatively older profile of the Pacific harvesters is evident in the following table.

TABLE 2: AVERAGE AGE OF FISH HARVESTERS, 2004

Atlantic Captains	Atlantic Crew	Pacific Captains	Pacific Crew
48 Years	38 Years	56 Years	43 Years

The following graph shows the distribution of enterprise heads alone by age groups. Nearly 70% of Pacific captains are over the age of 50 compared to 44% for Atlantic captains.



Graph 1 also describes the small numbers of young new entrants coming into the fishing fleets in recent years: only 20% of Atlantic enterprise heads and 7% of Pacific skippers are under the age of 40.

Interviewees were asked when they plan to retire from actively operating their fishing enterprises: 34% of Atlantic enterprise heads plan to retire within 10 years, compared to 44% of Pacific skippers.<sup>3</sup>

**TABLE 3: WHEN ENTERPRISE HEADS PLAN TO RETIRE FROM ACTIVE FISHING<sup>4</sup>**

	Atlantic Captains	Pacific Captains
Within 10 Years	34%	44%
Within 15 Years	48%	53%

In summary, this survey data on age characteristics of fish harvesters point to a substantial change in the population of enterprise heads over the next decade, with large numbers of retirees. This also means that increasing numbers of individuals will soon be selling or transferring their licences and will be concerned about financing their retirements.

### 2.2.2. Income from Sales of Fish

The surveys asked enterprise heads to identify value of sales of fish in 2003. The following table describes the responses for the Atlantic fisheries.

**TABLE 4: GROSS VALUE OF CATCH IN 2003 BY ATLANTIC FISHERY GROUPS (IN \$ 000s AND PERCENT)**

	Average	\$50 or less	\$51 to \$100	\$101 to \$200	>\$200	No Answer
Québec Lobster	\$86	19%	51%	17%	< 1%	12%
Gulf Lobster	\$88	19%	43%	20%	< 4%	11%
Scotia-Fundy Lobster	\$181	13%	24%	17%	26%	18%
Specialist Fleets	\$362	10%	10%	7%	57%	17%
N&L <35'	\$92	59%	21%	5%	8%	7%
N&L 35' to 44'	\$244	5%	8%	33%	44%	10%
N&L 45' & Over	\$509	1%	2%	9%	77%	12%

In the analysis of survey data, the Atlantic respondents are divided into fishery groups or fleets:

- Inshore enterprises (vessels <45') with lobster licences in Québec, the Gulf Region and Scotia-Fundy Region;
- Specialist enterprises (primarily midshore vessels >45') in Québec and the Maritime Provinces;<sup>5</sup> and
- Three fleets in Newfoundland & Labrador defined by vessel size.

It is evident from this data that there are significant differences in gross earning levels both within and among fleets. The <35' fleet in Newfoundland & Labrador stands out as having large numbers of participants with relatively low revenues from fishing.

<sup>3</sup> These figures may underestimate the numbers of imminent retirees due to the high number of "Don't Know" responses: 12% for Pacific captains and 9% for Atlantic captains.

<sup>4</sup> This table, and most of those that follow, describes the percentages of respondents to the survey item, within each category of respondents, who selected each particular response.

<sup>5</sup> This group does include a small number of fixed gear groundfish enterprises <45' in Scotia-Fundy.

The <45' fleets, in Québec and the Maritimes were heavily dependent on lobster with crab, groundfish, herring and mackerel being of some importance. For the midshore fleets crab and shrimp were most important. In Newfoundland & Labrador, the greatest dependence was on crab for vessels <45', with groundfish, lobster and shrimp being of some importance. For vessels over 45', shrimp and crab were the dominant sources of fishing revenues.

The responses on the same question from enterprise heads in the Pacific Region were as follows:

**TABLE 5: GROSS VALUE OF CATCH IN 2003 BY PACIFIC FISHERY GROUPS (IN \$ 000s AND PERCENT)**

	Average	\$50 or less	\$51 to \$100	\$101 to \$300	>\$300	No Answer
Seine Vessels	\$286	12%	10%	35%	26%	19%
Gillnet Vessels	\$41	76%	4%	7%	1%	13%
Salmon Troll	\$71	44%	25%	9%	2%	20%
Halibut/Sablefish	\$268	17%	14%	17%	27%	25%

Here, the fleet groups are:

- Seine vessels fishing salmon and herring;
- Vessels fishing salmon and herring with gillnets;
- Vessels fishing salmon with trolling gear; and
- Vessels fishing halibut and/or sablefish within individual transferable quota regimes.

Most enterprises in these fleets owned licences or quota in other important fisheries including tuna, prawn, crab and groundfish. The halibut/sablefish fleet was the most diversified in term of species fished.

The heavy dependence of the gillnet and troll fleets on salmon means that skippers and crew on these vessels get relatively few weeks of fishing activity over the course of the year.

The management system in the Pacific Region encourages licence stacking and leasing, as well as leasing of quota for ITQ fisheries. Nearly three-quarters of enterprises that fished salmon in 2003 owned only one licence, while 22% had 2 licences and 3% had 3 or more. Twenty-three percent of enterprises that fished herring had 2 herring licences, and 18% had 3 or more licences.

Out of the 300 enterprise heads who were interviewed, 50 (or 17%) leased licences and 37 leased quotas. When asked the cost of leasing licences as a percent of the total catch value, only a few interviewees responded. The average cost was 57% with significant variation. For leased quota, the average was 57% for halibut and 63% for roe herring.

### 2.2.3. Crew Employment

On the Atlantic coast, captains on inshore vessels (< 45') typically employed two crewmembers, while larger vessels employed 4 or more crew. On the Pacific coast, seine boats used 5 or more crew, halibut/sablefish boats 3 or more, and the gillnet and troll vessels 2 crewmembers. In the gillnet fleet, 29% of vessels employed no crew.

Enterprise heads were asked whether it was easy or difficult to recruit the qualified crew they needed for their fishing operations. On the Atlantic coast, 7% of respondents said it was "very difficult" and 13% said "somewhat difficult" to recruit qualified crew. In the specialist

fleet however, 18% said it was “very difficult” and 14% said that it was “somewhat difficult”. Over 40% of Atlantic captains said recruitment was not a problem because they had long-term crew, many of whom were family members.

Average duration of employment for crew for Atlantic fleets ranged from 12 to 15 weeks in different fleets.

The crew recruitment situation was more problematic on the Pacific coast. Twenty-six percent of all enterprise heads reported that it was “very difficult” to recruit the crew they needed and 22% said it was “somewhat difficult”. The greatest difficulties were experienced in the seine fleet (42% “very difficult” and 28% “somewhat difficult”) and troll fleet (39% “very difficult”). The average duration of employment reported for all crew was 9 weeks, ranging from 12 weeks on halibut/sablefish vessels to 6 weeks on gillnet vessels.

Enterprise heads were asked their views on why it might be difficult to recruit qualified crew. The responses for both coasts were as follows:

**TABLE 6: MAJOR REASONS GIVEN FOR DIFFICULTIES IN FINDING OR RETAINING CREWMEMBERS**

	Atlantic Captains	Pacific Captains
Wages too low, other jobs pay more	40%	42%
Seasonal nature of fishery, not enough weeks of work	26%	46%
Fewer young people entering the fishery	10%	22%

This data again points to a less positive labour market environment in the Pacific Region, although there are issues on both coasts.

#### 2.2.4. Acquisition of Enterprise

Enterprise heads on the Atlantic coast have owned and operated their fishing businesses for an average of 21 years with little variation across the different fleets and regions. It is interesting to note, however, the differences between fleets in terms of recruitment of new entrants and frequency of turnover.

**TABLE 7: NUMBER OF YEARS OWNING FISHING ENTERPRISE BY ATLANTIC FISHERY GROUPS**

	Average (Years)	5 years or less	6 to 10 years	> 30 years
Overall	21	8%	12%	24%
Québec Lobster	18	11%	19%	19%
Gulf Lobster	22	6%	15%	30%
Scotia-Fundy Lobster	22	9%	14%	29%
Specialist Fleets	21	9%	11%	21%
N&L <35'	22	5%	5%	18%
N&L 35' to 44'	22	8%	7%	15%
N&L 45' & Over	21	6%	10%	17%

It would appear that the <45' fleet in Québec had the most new entrants to owner-operator status in the past 10 years, while Newfoundland & Labrador have had the fewest new entrants. Captains are holding onto their enterprises longer in the Gulf and Scotia-Fundy regions compared to other regions.

When we look at parallel responses for the Pacific Region we see quite different patterns.

**TABLE 8: NUMBER OF YEARS OWNING FISHING ENTERPRISE BY PACIFIC FISHERY GROUPS**

	Average (Years)	5 years or less	6 to 10 years	> 30 years
Overall	30	1%	4%	48%
Seine	34	0%	0%	63%
Gillnet	30	2%	4%	49%
Salmon Troll	28	1%	6%	41%
Halibut/Sablefish	30	0%	2%	44%

Over 40% of Pacific enterprise heads have owned their enterprises for more than 30 years, 63% in the seine fleet. Despite the relatively older profile of captains in BC, and the expectation that many will be leaving the fishery, there have been very few harvesters becoming enterprise heads over the past decade.

The surveys asked from whom the enterprise heads acquired their licences.

**TABLE 9: FISHING ENTERPRISE WAS ACQUIRED**

	Atlantic Captains	Pacific Captains
From a family member	36%	23%
From a harvester in the community	24%	33%
From a harvester in another community	11%	19%
From a harvester for whom you crewed (family or not)	35%	26%
From a fish buyer/processor company	N/A	10%
From government	20%	5%

This information points to the importance of family and community as sources of access to fishing equity. Over half of all enterprise heads acquired their enterprises from a family or community member, and over a third in the Atlantic had worked as crew for that person. For Atlantic captains, 30% had worked in a family enterprise and then taken it over, compared to 19% on the Pacific coast.

With regard to differences among fleets, for Atlantic fisheries the importance of families was consistent across all sectors. In Newfoundland & Labrador, however, government was much more important (over 30% of all enterprises were acquired from DFO directly), while local community was relatively less important (10%).<sup>6</sup>

<sup>6</sup> These responses in Newfoundland & Labrador may be explained by the fact that new licences for the cod fishery were being issued by DFO until the late 1980s.

Differences among fleets were limited in the Pacific Region except for the seine fleet where 28% of all enterprises were acquired from fish processor companies, compared to 11% for gillnetters, and 4% each for trollers and halibut/sablefish.

The survey respondents were asked about their entry costs to buy an enterprise (licences, vessel and gear). For all Atlantic fleets, the average cost was \$101,600 and for Pacific fleets, \$81,600. Those who bought over 30 years ago paid an average of \$60,000 in the Atlantic and \$41,600 in the Pacific. Those who bought during the past 5 years in the Atlantic paid an average of \$220,000. (There were too few recent purchases in the Pacific to provide reliable information.)

When asked how they financed their original purchases, the enterprise heads identified the following sources of capital:

**TABLE 10: SOURCES OF FUNDS TO PURCHASE FISHING ENTERPRISES**

	Atlantic Captains	Pacific Captains
Did Not Borrow	31%	21%
Bank/Credit Union	41%	53%
Fish Processor/Buyer	11%	8%
Fisheries Loan Board	15%	N/A
Family/Friends	4%	12%

This evidence suggests that in the past, the costs of acquiring fishing enterprises were largely met through self-financing (with some level of family support) or conventional arrangements with lending institutions. It does not appear that fish companies played a significant role although they were a factor. The government loan boards were important as well in the Atlantic, particularly in Newfoundland & Labrador where upwards of 30% of harvesters there borrowed from the Fisheries Loan Board. In Québec, some 58% of captains borrowed from banks or credit unions, perhaps reflecting the role of the *caisses populaires* in rural communities.

There was less variation among Pacific fleets although the banks/credit unions were very important for the seine and halibut/sablefish fleets: 70% and 69% respectively borrowed from such lending institutions.

Enterprise heads were asked if they have, at any time, entered into agreements with fish processor or buyer companies to borrow money in return for certain obligations. The incidence among fleets is shown in the following table.

**TABLE 11: ENTERED INTO A FINANCIAL AGREEMENT WITH BUYER/PROCESSOR**

Atlantic		Pacific	
Overall	23%	Overall	25%
Québec Lobster	8%	Seine	26%
Gulf Lobster	23%	Gillnet	28%
Scotia-Fundy Lobster	15%	Troller	15%
Specialist Fleets	12%	Halibut/Sablefish	33%
N&L <35'	38%		
N&L 35' to 44'	47%		
N&L 45' & Over	35%		

This information suggests that such lending arrangements are more common both the Pacific and Newfoundland & Labrador Regions. The level of occurrence in the latter region is particularly striking.

The great majority of these agreements with processors or buyers involved the obligation to sell fish to the lender. However, 6% of such agreements on the Atlantic coast and 16% on the Pacific coast involved control by the lender over the future sale of the licence.

### 2.2.5. Market Value of Enterprises – Atlantic

The evidence presented above indicated that over a third of Atlantic enterprise heads, and close to half of Pacific enterprise heads, plan to retire by 2013. These respondents were asked to estimate their income needs for retirement in addition to Canada Pension income. For Atlantic captains, the mean estimate was \$34,000 without great variations among fleets, and for Pacific respondents, it was \$38,000 with significantly higher expectations among seine and halibut/sablefish captains.

The enterprise heads were asked to estimate the current market value of their enterprises (licences, quotas, vessels and gear). The following table summarizes the results for Atlantic fleets.

**TABLE 12: CURRENT MARKET VALUE OF FISHING ENTERPRISE, BY FISHERY GROUP**

	Inshore Lobster Fleet					N&L Fleet		
	Overall	Québec	Gulf	Scotia-Fundy	Specialists	<35 ft	35 to 44.9 ft	45 ft and over
	(n=1,044)	(n=127)	(n=271)	(n=262)	(n=71)	(n=160)	(n=55)	(n=98)
Mean Current Market Values	\$616,100	\$339,300	\$352,800	\$615,700	\$1.32 million	\$296,700	\$877,600	\$1.6 million
Coefficient of Variation	109%	74%	77%	80%	78%	137%	65%	61%

The coefficient of variation is a measure of the degree of variation around the mean score – the higher the coefficient, the greater the range and diversity of scores.<sup>7</sup>

The following table shows the estimated current market values for enterprises and separately for vessels and gear, and licences and quotas. The data is broken down by lobster fishing areas for the Maritime Provinces and Québec. The table also provides ratios between reported revenues from sales of fish in 2003 and estimated current market values for the tangible assets, the access rights (licences and quotas) and the total enterprises.

**TABLE 13: COMPARISON OF CATCH VALUE TO ESTIMATED MARKET VALUE OF ASSETS, BY FISHERY GROUP**

Fishery	n	Catch Value	Fishing Enterprise	Factor	Vessel & Gear	Factor	Licence & Quota	Factor
<i>Québec</i>	<i>111</i>	<i>\$86,200</i>	<i>\$339,300</i>	<i>3.94</i>	<i>\$159,800</i>	<i>1.85</i>	<i>\$187,000</i>	<i>2.17</i>
LFA 19, 20a, 20b, 21 (Gaspé)	39	\$72,400	\$354,100	4.89	\$120,800	1.67	\$231,900	3.20
LFA 22 (les Îles de la Madeleine)	57	\$105,700	\$319,400	3.02	\$179,300	1.70	\$150,200	1.42
LFA 15, 16, 17, 18	15	\$40,600	\$377,900	9.31	\$187,300	4.61	\$212,700	5.24
<i>Gulf</i>	<i>262</i>	<i>\$88,300</i>	<i>\$352,800</i>	<i>3.99</i>	<i>\$140,100</i>	<i>1.59</i>	<i>\$213,000</i>	<i>2.41</i>
LFA 23	38	\$89,300	\$320,200	3.59	\$145,100	1.62	\$183,200	2.05
LFA 24	54	\$120,600	\$473,500	3.93	\$175,600	1.46	\$293,200	2.43
LFA 25	59	\$51,500	\$221,100	4.29	\$107,300	2.08	\$113,500	2.20
LFA 26A, 26B	105	\$95,200	\$375,200	3.94	\$137,200	1.44	\$236,600	2.49
<i>Scotia-Fundy</i>	<i>245</i>	<i>\$180,500</i>	<i>\$615,700</i>	<i>3.41</i>	<i>\$201,500</i>	<i>1.12</i>	<i>\$413,100</i>	<i>2.29</i>
LFA 27, 28, 29	30	\$124,800	\$452,100	3.62	\$203,500	1.63	\$284,100	2.28
LFA 33	50	\$81,400	\$243,200	2.99	\$103,400	1.27	\$136,700	1.68
LFA 34	81	\$265,600	\$987,700	3.72	\$291,900	1.10	\$690,100	2.60
LFA 36, 38, 41 LFA 30, 31A, 31B, 32, 35	47	\$196,900	\$555,200	2.82	\$155,500	0.79	\$374,500	1.90
<i>Specialists</i>	<i>59</i>	<i>\$362,300</i>	<i>\$1.3 million</i>	<i>3.65</i>	<i>\$514,000</i>	<i>1.42</i>	<i>\$671,800</i>	<i>1.85</i>
<i>Newfoundland</i>	<i>302</i>	<i>\$251,000</i>	<i>\$796,300</i>	<i>3.17</i>	<i>\$429,000</i>	<i>1.71</i>	<i>\$366,200</i>	<i>1.46</i>
Under 35 ft	154	\$92,200	\$296,700	3.22	\$127,600	1.38	\$157,200	1.70
35 to 44.9 ft	51	\$244,300	\$877,600	3.59	\$437,700	1.79	\$443,700	1.82
45 ft and over	97	\$509,200	\$1.6 million	3.08	\$885,500	1.74	\$657,300	1.29
<i>Total All Regions</i>	<i>989<sup>8</sup></i>	<i>\$181,500</i>	<i>\$616,100</i>	<i>3.39</i>	<i>\$269,800</i>	<i>1.49</i>	<i>\$336,000</i>	<i>1.85</i>

<sup>7</sup> In calculating these mean scores, the “outlier” responses have been removed. “Outliers” are the limited number of extreme responses that are judged to be unrepresentative of the total population. They may result from anomalous cases, misunderstanding of the survey questions by respondents, or data entry errors.

<sup>8</sup> The N in these tables is less than the total survey population because not all respondents provided answers to these questionnaire items.

One very significant finding from this data is that in every fleet sector, except inshore enterprises in les Îles de la Madeleine and midshore enterprises in Newfoundland & Labrador, the estimated market value of fisheries' access rights (licences and quotas) represents a larger proportion of total estimated enterprise value than the tangible assets (vessels and gear).

A second important observation is that for most fisheries groups, the ratio of enterprise value to total revenues from the business exceeds the conventional business standard of 3.<sup>9</sup> The implications of this issue will be discussed in greater depth in the section below on financial analysis of fleets.

### 2.2.6. Market Value of Enterprises – Pacific

The market values of enterprises as perceived by the Pacific enterprise heads who participated in the survey were as follows.

**TABLE 14: CURRENT MARKET VALUE OF FISHING ENTERPRISE, BY FISHERY GROUP**

	Overall (n=249)	Seine (n=34)	Gillnet (n=105)	Salmon Troll (n=71)	Halibut/Sablefish (n=39)
Mean Market Value	\$611,600	\$1.47 million	\$269,400	\$301,100	\$1.37 million
Coefficient of Variation	140%	79%	111%	82%	89%

This data suggest somewhat greater variations in estimated market values both within and between fleets. The ratios of estimated value to fishing revenues are as follows.

**TABLE 15: AVERAGE CATCH VALUE TO AVERAGE ESTIMATED MARKET VALUE OF ASSETS, BY PACIFIC FISHERY GROUP**

Fishery	n	Catch Value	Total Fishing Enterprise	Ratio	Vessel & Gear Estimated Value	Vessel & Gear as % of Total
Seine	33	\$285,800	\$1.47 million	5.1	\$583,500	40%
Gillnet	101	\$40,500	\$269,400	6.6	\$97,000	36%
Salmon Troll	68	\$70,900	\$301,100	4.2	\$109,100	36%
Halibut/Sablefish	36	\$268,300	\$1.37 million	5.1	\$315,800	23%
<b>Overall</b>	<b>244</b>	<b>\$116,800</b>	<b>\$611,600</b>	<b>5.2</b>	<b>\$201,200</b>	<b>33%</b>

For Pacific fleets, the estimated market values for hard assets represent one-third on average of the estimated total perceived market value of the enterprise for all fleets. This suggests that estimated market values for access rights in the Pacific fishery range from 60% to 77% of total enterprise values in different fleets, and that the ratio of total enterprise value to fishing revenues in these fleets is well in excess of the typical 3 to 1.

### 2.2.7. Transfer of Enterprises

Enterprise heads on both coasts were asked questions about what they think will happen when they retire from active fishing. The first question focussed on their objectives when they attempt to sell their enterprises.

<sup>9</sup> The financial experts who participated in this project described their "rule of thumb" for the assessment of the value of enterprises: the market value of a small business can be roughly estimated to be three times the average annual gross earnings from sales of goods or services.

**TABLE 16: OBJECTIVES FOR DIVESTITURE OF ENTERPRISES**

	Atlantic Captains	Pacific Captains
Keep licence in family	58%	32%
Get the highest price possible	30%	43%
Keep licence in community (not family)	13%	10%
Lease licence to other fishermen as a source of ongoing revenue	N/A	13%
Lease quota to other fishermen as a source of ongoing revenue	N/A	9%

The sharp differences in the economic and fisheries' management environments in the Atlantic and Pacific coasts are evident in these responses. A total of 71% of Atlantic enterprise heads expressed an intention to keep ownership of their enterprises in their families or communities. These responses are relatively consistent across fleet sectors and regions, the exception being the <35' fleet in Newfoundland & Labrador where 47% aim to sell for the highest possible price.

For Pacific enterprise heads, 42% of respondents aim to keep licences in the family or community, while 65% appear to be looking for an optimal financial gain either through selling at the highest price possible or leasing to obtain continuing revenue.

Interviewees were asked to identify who they thought would pay the highest prices for their enterprises if they put them up for sale today.

**TABLE 17: WHO WILL PAY THE HIGHEST PRICES FOR FISHING ENTERPRISES**

	Atlantic Captains	Pacific Captains
DFO (Federal Government) <sup>10</sup>	30%	18%
Processor/Buyer Company	28%	12%
Current Crewmember <sup>11</sup>	15%	7%
Core Licence Holder <sup>12</sup>	14%	32%
First Nations Related Agency	3%	40%
Other	3%	4%
Don't Know/No Response	9%	10%

This data may explain a great deal about the perceived market demand that sustains the current high expectations for enterprise value. The question was not "to whom will you sell?" but "who will pay the highest price?" The data suggest that the upward pressure on market prices for access rights in the Atlantic is government and processors. In the Pacific Region, the strongest potential purchasers are seen to be First Nations' agencies related to new treaty agreements and other fish harvesters who may be consolidating larger enterprises with more licences.

In terms of the different fleet sectors, processors were seen to be the strongest potential purchasers of enterprises in the Scotia-Fundy lobster fleet (43% of respondents there said they would pay the highest prices) and in the Newfoundland & Labrador fleets (36%, 53% and 75% respectively for the 3 fleet sectors). In the Pacific, processors were seen to be a relatively important factor in the seine fleet and the

<sup>10</sup> These figures are higher in Québec and the Maritimes (e.g., 51% in the Gulf Region and 49% for the specialist fleet) where many licences have been purchased under the Marshall Program. There has been no such program in Newfoundland & Labrador although land claims negotiations are underway.

<sup>11</sup> I.e. someone now working in the industry as a crewmember, not necessarily with the interviewee.

<sup>12</sup> This refers to a fishing captain who already owns a fishing enterprise. This is problematic in the Atlantic where DFO's Owner-Operator policy states that an individual can only own and operate one enterprise in <65' fleets.

halibut/sablefish fleet (28% and 23% respectively), while First Nations' agencies would have the greatest impact on the seine fleet (58%).

Interviewees were asked if they thought high licence prices were a deterrent for new entrants wanting to become owner-operators.

**TABLE 18: HIGH LICENCE PRICES DETER NEW ENTRANTS**

	Atlantic Captains	Pacific Captains
Not a problem at all	7%	9%
Not very serious	7%	5%
Somewhat serious	20%	15%
Very serious problem	64%	64%

There is a virtual consensus among respondents that high licence prices are a serious problem for new entrants.

When asked what might be done to make it easier for new entrants to purchase enterprises, the following were the responses:

**TABLE 19: WAYS TO MAKE IT EASIER FOR NEW ENTRANTS TO PURCHASE ENTERPRISES**

	Atlantic Captains	Pacific Captains
Low interest loan programs, Loan Board, tax relief	44%	31%
Control prices of licences/quotas	10%	14%
Government stop buying licences for First Nations	10%	6%
Prevent processors/buyers from buying licences	5%	13%
Nothing should be done	5%	10%
Don't Know	19%	9%

The largest number of comments centred on ways to reduce borrowing costs and the removal of capital gains on sales of enterprises. Responses to this item were somewhat less focussed, reflecting perhaps that the interviewees occupy an ambivalent position: as established enterprise heads, many of them nearing retirement age, they stand to gain financially from higher licence prices, and yet many are concerned about barriers for young new entrants including family members.

### **2.2.8. Participation by Captains in Fisheries Training**

The enterprise heads were asked a series of questions about education and training related to their profession.

Currently, the only mandatory training requirement for fish harvesters is the Marine Emergency Duties (MED) course. Transport Canada regulations require all captains and crew to complete short courses meeting their MED standard by 2007. The survey findings suggest that 70% of enterprise heads in the Atlantic, and fewer than 40% in the Pacific, had completed the course at the time of the survey in 2004. There were variations among fleets – a particular concern is that only about a third of captains in the <35' fleet in Newfoundland & Labrador had completed the course. Of those who had completed the course, over 80% on both coasts described it as either "useful" or "very useful".

Not counting the MED course, 35% of captains on the Atlantic coast, and 45% on the Pacific, reported that they had never done any other fisheries-related training. There were some differences among sectors: close to half of captains in lobster fisheries in the Gulf and Scotia-Fundy had done no training, while in specialist or midshore fleets, upwards of 80% of captains had taken relevant training.

Those interviewees who had done training were asked to identify the types of courses taken. The most frequently taken training was the Fishing Master IV “ticket”, and a few had done the FM III or II levels. In specialist and midshore fleets in the Atlantic some 60% of captains had Fishing Master qualifications.

**TABLE 20: PERCENT OF CAPTAINS WHO HAVE TAKEN FISHERIES-RELATED COURSES**

Training Course	Atlantic Captains	Pacific Captains
Fishing Masters IV, III, II or I	33%	29%
Navigation	20%	15%
Gear mending	15%	6%
Safety & first aid	15%	13%
Radio/communications	9%	6%
Engine repair	9%	6%
Vessel handling	8%	5%
Vessel maintenance	8%	—

The enterprise heads were asked about their interest in taking fisheries training in the future, and what course they would like to pursue.

**TABLE 21: LEVELS OF INTEREST IN TAKING FISHERIES-RELATED COURSES**

Training Course	Atlantic Captains	Pacific Captains
Not interested in any courses	52%	59%
Small business management	18%	10%
Stock assessment, fisheries science	16%	10%
Fishing Masters IV, III, II or I	16%	20%
Navigation	12%	7%
Gear mending	6%	5%
Academic upgrading	7%	6%
Engine repair	10%	6%
Vessel handling	8%	5%
Vessel maintenance	8%	6%

The level of interest in non-traditional training courses in business management and fisheries science is notable here.

Interviewees were asked why such a high percentage of captains were not interested in fisheries training. There were a range of responses, and the most frequent are described in the following table.

**TABLE 22: REASONS GIVEN FOR LACK OF INTEREST IN FISHERIES-RELATED COURSES**

Training Course	Atlantic Captains	Pacific Captains
Training not necessary, already know what needs to be known	28%	17%
We learn on the job, from family members	14%	30%
Training has no value, not practical	17%	4%
High costs of training	9%	8%
Literacy issues, lack the schooling	9%	7%
Too old, will soon retire	9%	9%
Course not offered locally	5%	4%
There is no future in fishery	—	8%

These responses reflect the tradition of informal training and learning on the job that characterize the profession. It would appear that the age of captains is a key factor: 72% of Atlantic captains who are 60 years or older were not interested in any training compared to 35% of those under 40.

The participating captains were asked to rate the effectiveness of different measures to encourage harvesters to take more training. The table describes the percent of respondents who felt that each measure was “somewhat” or “very effective”.

**TABLE 23: EFFECTIVENESS OF MEASURES TO PROMOTE FISH HARVESTER PARTICIPATION IN TRAINING**

Measures	Atlantic Captains	Pacific Captains
Offering more courses in local communities	Somewhat - 41% Very - 34%	Somewhat - 44% Very - 23%
Offering courses on the Internet	Somewhat - 32% Very - 9%	Somewhat - 33% Very - 10%
Reducing costs of taking courses	Somewhat - 31% Very - 48%	Somewhat - 25% Very - 38%
Having fishermen’s organizations deliver courses	Somewhat - 42% Very - 29%	Somewhat - 34% Very - 23%

This information suggests that the most effective way to increase harvester participation in training on both coasts would be to find ways to lower costs. These responses were relatively consistent across fleets, but enterprise heads in Newfoundland & Labrador saw both offering courses locally and reducing costs as much more effective than respondents in other regions and fleets. (Anecdotal evidence indicates that costs and local provision of training are closely related in that the major expense of taking training is often the travel and

living away from home.)

The final survey question to captains asked what advice they would give to a young person considering a career as a professional fish harvester.

**TABLE 24: ADVICE ON CAREERS AS PROFESSIONAL FISH HARVESTERS**

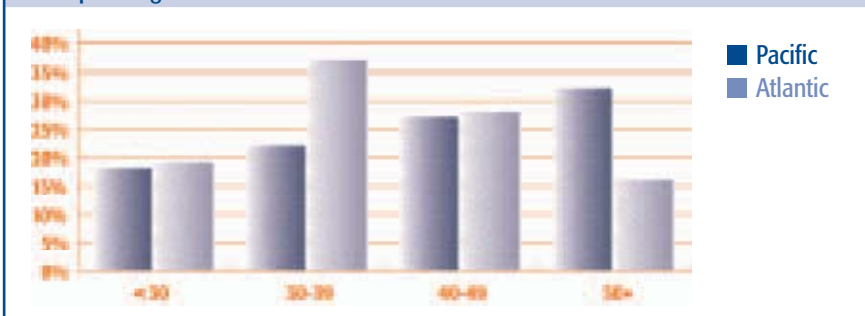
	Atlantic Captains	Pacific Captains
Strongly discourage	22%	45%
Slightly discourage	18%	17%
Slightly encourage	32%	27%
Strongly encourage	22%	6%

Over 60% of Pacific enterprise heads would discourage a young person from a career in fishing, compared to 40% in the Atlantic. In terms of differences among fleet sectors, over half of halibut/sablefish harvesters on the West Coast would give positive advice, while nearly 60% of gillnet captains would strongly discourage new entrants. On the Atlantic Coast, the Québec captains were the most positive, while inshore (<45') skippers in Newfoundland & Labrador were the most negative.

### 2.2.9. Crew Labour Force: Age Profile

As mentioned above, the average age of crewmembers who were surveyed was 39 years in the Atlantic and 43 years in the Pacific. The following graph shows the distribution of age groups in the crew labour force.

**Graph 2: Age Profile of Atlantic and Pacific Crewmembers**



The important point to note about the crew labour force is the size of the 30 to 39 age cohort. This is the age group that might be expected to be in the best position, in terms of experience, commitment to the industry and financial savings, to be able to take over enterprises from retiring captains.

In the Atlantic, this is the largest age group and this may be a positive sign in terms of the potential for inter-generational transfer. There might be concern, however, about the relatively small proportion of recent recruits in the labour force (i.e., under 30 years of age).

In the Pacific Region, the picture is again very different. The largest age cohort is the oldest (50 or more years of age) and just over one-fifth of the labour force is in the key 30 to 39 age group.

Crewmembers in the Pacific region had worked in the industry an average of 21 years compared to 14 years on the East Coast.

### 2.2.10. Crew Incomes and Employment

Crewmembers in the Atlantic earned an average of \$25,300 compared to \$22,600 in the Pacific Region. The following table shows the distribution of incomes for the crew labour force.

TABLE 25: DISTRIBUTION OF CREW INCOMES, 2003

Income	Atlantic	Pacific
\$10,000 or less	12%	28%
\$10,000 to \$19,999	23%	29%
\$20,000 to \$29,999	20%	11%
\$30,000 to \$39,999	17%	8%
\$40,000 to \$49,999	6%	5%
Over \$50,000	9%	10%
Don't Know	14%	9%

This information confirms that crew incomes in general are low, and measurably lower in the Pacific Region. This, of course, has significant implications in terms of the capacity of crewmembers to build the capital resources to become owner-operators, leaving aside the question of increasing market prices for access rights.<sup>15</sup>

TABLE 26: MEMBER OF ORGANIZATION, BY FISHERY REGION

Member	Pacific	Québec	Gulf	S-F	N&L
Yes	27%	29%	33%	11%	72%
No	72%	71%	65%	89%	28%

The majority of fishing crew workers do not belong to organizations that represent them on industry issues except in Newfoundland & Labrador.

The interviewees were asked about any employment in the previous year outside of crew work on fishing vessels. It is significant to note the overall dependence on the fishery broadly defined: 46% of Pacific crew and 37% of Atlantic crew also worked in shoreline or coastal harvesting activities, and 5% and 4% respectively worked in seafood processing. Thirty percent of Pacific crew worked in non-fishery related jobs, compared to only 9% in the Atlantic. The majority of jobs outside of the fishery were in construction work or farming, and in forestry as well on the West Coast.

<sup>15</sup> The limited sample size does not allow for statistically reliable breakdowns for fleet sectors. The indications are that the income levels on each coast are consistent across sectors, the exception being the Scotia-Fundy Region where average crew income was significantly higher (\$36,000).

The survey findings suggest a quite different pattern of labour force participation on the two coasts.

**TABLE 27: NUMBER OF FISHING ENTERPRISE HEADS FOR WHOM CREW WORKED SINCE STARTED FISHING, BY FISHERY REGION**

Number	Pacific	Québec	Gulf	S-F	N&L
One only	21%	46%	35%	24%	39%
Two	11%	18%	20%	15%	24%
Three	9%	16%	19%	12%	13%
Four	9%	4%	7%	11%	12%
Five	9%	7%	6%	13%	4%
More than Five	25%	9%	13%	24%	8%
More than 10	17%	N/A	N/A	N/A	N/A
Average	6.0	2.4	3.1	4.8	2.8

Crewmembers in the Pacific Region have generally worked for more enterprise heads than their peers in other regions, the possible exception on the Atlantic coast being the Scotia-Fundy Region. Well over half the crewmember respondents in Québec, the Gulf and Newfoundland & Labrador have worked for two captains at the most over their careers, compared to less than a third in the Pacific Region.

During the year before the survey, 83% of Atlantic crew and 71% of Pacific crew had worked for one captain only.

The following table describes the relationship of crewmembers to the enterprise heads they work for.

**TABLE 28: RELATION TO MAIN FISHING EMPLOYER DURING PREVIOUS YEAR OF FISHING**

	Atlantic	Pacific
Captain (not family) from Community	38%	37%
Parent (father or mother)	24%	17%
Captain (not family) from outside Community	17%	32%
Other Family Member or Relative	15%	11%
Brother/Sister	13%	3%
Spouse (husband or wife)	7%	15%

This information suggests that family and community relationships are very important on both coasts, although significantly more so on the Atlantic side. Family and community ties are strongest in Québec and the Gulf where only 7% and 11% respectively work for non-related captains from other communities, compared to 25% in Newfoundland & Labrador and 32% in the Pacific Region.

### 2.2.11. Crewmembers' Future Plans

Crewmembers who participated in the survey were asked about future plans for becoming an owner-operator or pursuing other directions.

TABLE 29: FUTURE PLAN, BY FISHERY REGION

	Pacific	Québec	Gulf	S-F	N&L
Continue working in the fishery as a crewmember	61%	48%	61%	53%	52%
Buy or take over a fishing enterprise and become a captain	12%	48%	34%	39%	43%
Stop working as a crewmember to take up other employment	15%	—	3%	7%	4%
Stop working and retire from all employment	4%	—	<1%	1%	<1%
Don't Know/No Response	8%	4%	2%	1%	1%

The crew population in the Pacific Region is again distinct in terms of low expectations of becoming enterprise owners and relatively higher expectations of leaving the fishery to seek other employment. Significantly, from 34% to 48% of Atlantic crew have aspirations to become enterprise heads.

The respondents who intend to remain crewmembers were asked why they do not plan to become owner-operators.

TABLE 30: MAIN REASONS FOR NOT BECOMING A FISHING ENTERPRISE HEAD<sup>14</sup>

	Atlantic	Pacific
Cannot afford the costs of buying an enterprise/ Licence prices/fish quota prices are too high	48%	42%
Not interested in becoming a fishing captain	26%	30%
Licences/quota unavailable	10%	5%
Age/retired/too old/personal reasons	7%	10%
Too much stress/difficulty/hassle/pressure	5%	—
Already share captain responsibilities with husband	5%	—
Lack knowledge, skills, experience to become a captain	4%	7%
Do not want/am unable to do the training required	—	5%
Cannot make sufficient income as a captain	4%	12%
Other (low fish stocks, lack of collateral, capital gains tax, limited opportunities to purchase enterprises)	6%	8%
Don't Know/No Response	2%	5%

It would appear that for those crewmembers who might have considered becoming enterprise heads, the most significant barrier is the cost of buying the vessel, licence(s) and/or quota.

<sup>14</sup> Respondents could provide more than one answer; totals may sum to more than 100%.

### 2.2.12. Purchase of Enterprises

Nearly two-thirds of those crewmembers who intend to become enterprise heads plan to do so within the next five years. When asked to identify the key factors that will determine when they will make the change, 31% of Atlantic respondents mentioned timing of when a family member will retire, and 16% mentioned personal financial situation. For West Coast crew, 30% mentioned personal financial situation and 25% mentioned the retirement of a family member.

A very important next question for those intending to become enterprise heads was: “from whom do you think you will acquire the fishing enterprise?”

TABLE 31: FISHING LICENCE WILL LIKELY BE ACQUIRED FROM...

	Atlantic	Pacific
Family member (for whom you crewed)	46%	60%
Licence holder from your community (for whom you did not crew)	19%	10%
Licence holder from your community (for whom you crewed)	13%	10%
Family member (for whom you did not crew)	–	5%
Licence holder from another community (for whom you did not crew)	9%	5%
Licence holder from another community (for whom you crewed)	6%	–
Other	9%	5%
Don't Know/No Response	8%	5%

It is again clear from this information that family and community relationships are very important elements of the process of recruiting new enterprise heads. Altogether, 65% of crewmembers in the Pacific who plan to take over enterprises, and 46% of Atlantic crew who plan to do the same, expect to take over an enterprise now owned by a family member or relative. Similarly, 70% of Pacific crew, and 69% of Atlantic crew, are planning to acquire enterprises from captains (whether family or not) for whom they worked as crewmembers. Forty-four percent of Atlantic crew who intend to take over a fishing enterprise worked for their parent(s) in 2003 and 30% worked for a captain from the local community.

Crewmembers who are planning to buy or take over fishing enterprises were asked to estimate their current purchase prices. The following table compares crewmember responses to this question, to the estimates of market values for fishing enterprises generated by the survey of enterprise heads.

**TABLE 32: AVERAGE ESTIMATES OF MARKET VALUE OF FISHING ENTERPRISES BY CREWMEMBERS AND ENTERPRISE HEADS**

	Atlantic	Pacific
Crewmembers	\$638,400	\$624,000
Enterprise Heads <sup>15</sup>	\$616,100	\$611,600

These are rather crude comparisons because they encompass wide variations in estimated market values for enterprises in different fleets. Nevertheless, it is striking that the averages for both coasts and for captains and crewmembers are so similar. It suggests broadly-shared perceptions of current market conditions for buying and selling fishing enterprises.

When asked about possible sources of capital, 60% of Atlantic crew who plan to purchase enterprises said they would use conventional bank or credit union sources (89% in Québec), and 23% said they would borrow from fish processor/buyer companies (48% in Newfoundland & Labrador). Loan boards were also important in Québec (33%) and Scotia-Fundy (21%). In the Pacific Region banks and credit unions and borrowing from family or friends were equally important (35%). It does not appear that processor companies play a significant role: only 5% referred to them as possible sources of credit.

Of the Atlantic crew who expect to borrow money from a fish buyer/processor, the great majority (50 of the 54) expected that they would be obligated to the buyer or processor: 37% expected to give the lender control over the future sale of the licence, and 9% said they would be obligated to sell fish to the particular buyer or processor.

When asked whether high licence prices are a barrier for crewmembers becoming enterprise heads, 76% of Atlantic crew and 83% of Pacific crew said they were a “very serious problem”.

When asked to suggest ways to make it easier for young fish harvesters to purchase fishing enterprises, the following were the responses:

**TABLE 33: SUGGESTED WAYS TO MAKE IT EASIER FOR YOUNG FISHERMEN TO PURCHASE FISHING ENTERPRISES**

	Atlantic	Pacific
Prevent processors/companies from buying up licences	4%	26%
Establish government loan program/tax relief	15%	6%
Lower prices of licences/smaller quotas	15%	22%
Government buyouts for First Nations is inflating prices/ should level playing field/government should not buy licences for FN	11%	4%
Lower interest rates/loans program	6%	3%
Eliminate/reduce government involvement	4%	—
Less restrictions on young fishermen	4%	2%
Limit/improve distribution of licences	4%	4%

It would appear from these responses that crew on the West Coast are most concerned about the influence of fish companies and purchases for First Nations, while East Coast crew focus more on loan programs and tax relief and on bringing down prices directly,

<sup>15</sup> See Tables 12 and 14 above.

although First Nations issues are also a concern.

### 2.2.13. Participation by Crew in Fisheries Training

The crewmembers in the survey were also asked about education and training related to their profession.

The responses indicate that 65% of crewmembers in the Atlantic, and less than 30% in the Pacific, had completed the MED course at the time of the survey in 2004. There were important variations among fleets – only 45% of crew in Newfoundland & Labrador had completed the course compared to 80% in Québec. Of those who had completed the course, over 90% on both coasts described it as either “useful” or “very useful”.

Not counting the MED course, nearly half of crew on the Atlantic coast, and two-thirds on the Pacific, reported that they had never done any other fisheries related training. The most frequently taken training was again the Fishing Master IV “ticket”, and a few had done the FM III or II levels.

TABLE 34: PERCENT OF CREWMEMBERS WHO HAVE TAKEN FISHERIES-RELATED COURSES

Training Course	Atlantic	Pacific
Fishing Masters IV, III, II or I	14%	17%
Navigation	20%	5%
Gear mending	15%	2%
Safety & first aid	12%	9%
Radio/communications	6%	6%
Engine repair	8%	2%
Vessel handling	10%	2%
Vessel maintenance	9%	3%
Fisheries science, stock assessment	—	4%

The crewmembers were asked about their interest in taking fisheries training in future, and what course they would like to pursue.

**TABLE 35: LEVELS OF INTEREST IN TAKING FISHERIES-RELATED COURSES**

Training Course	Atlantic	Pacific
Not interested in any courses	34%	35%
Safety/First Aid/MED	4%	28%
Small business management	19%	17%
Stock assessment, fisheries science	17%	17%
Fishing Masters IV, III, II or I	32%	28%
Navigation	26%	23%
Gear mending	17%	12%
Academic upgrading	10%	13%
Engine repair	18%	15%
Vessel handling	19%	16%
Vessel maintenance	18%	16%

Compared to enterprise heads, there is more interest in training, and in a broad range of training, among crewmembers. The level of interest in business management and fisheries science is again notable.

When asked why so many crew were not interested in fisheries training, the responses were similar to the captains but not as emphatic.

**TABLE 36: REASONS GIVEN FOR LACK OF INTEREST IN FISHERIES-RELATED COURSES**

Training Course	Atlantic	Pacific
Training not necessary, already know what needs to be known	16%	19%
We learn on the job, from family members	18%	25%
Training has no value, not practical	14%	18%
High costs of training	11%	11%
Literacy issues, lack the schooling	6%	4%
Too old, will soon retire	10%	5%
Course not offered locally	3%	1%
There is no future in fishery	4%	15%

These responses, again, reflect the tradition of learning on the job that typifies the profession. There are concerns about cost, practical utility and on the West Coast, the lack of a secure future in the industry.

When asked to rate the effectiveness of different measures to encourage harvesters to take more training, the crewmembers provided the following “somewhat effective” or “very effective” ratings.

**TABLE 37: EFFECTIVENESS OF MEASURES TO PROMOTE FISH HARVESTER PARTICIPATION IN TRAINING**

Measures	Atlantic	Pacific
Offering more courses in local communities	Somewhat - 44% Very - 39%	Somewhat - 49% Very - 22%
Offering courses on the Internet	Somewhat - 37% Very - 13%	Somewhat - 42% Very - 14%
Reducing costs of taking courses	Somewhat - 29% Very - 57%	Somewhat - 28% Very - 51%
Having fishermen’s organizations deliver courses	Somewhat - 43% Very - 38%	Somewhat - 43% Very - 30%

Again, the most effective way to increase harvester participation in training on both coasts would appear to be to lower costs. All of the measures were seen to have some effectiveness.

The final survey question to crewmembers asked what advice they would give to a young person considering a career as a professional fish harvester.

**TABLE 38: ADVICE ON CAREERS AS PROFESSIONAL FISH HARVESTERS**

	Atlantic	Pacific
Strongly discourage	22%	43%
Slightly discourage	19%	21%
Slightly encourage	36%	28%
Strongly encourage	18%	6%

Over 60% of Pacific crewmembers would discourage a young person from a career in fishing, compared to 41% in the Atlantic.

## **2.3. KEY INFORMANT INTERVIEWS & CONSULTATIONS**

The interviews with fish harvester leaders, government officials and independent experts produced a wealth of information and insight regarding current trends in fisheries and about policy and program options. This section includes a brief synopsis of main themes and recommendations.

### **2.3.1. Atlantic: Changes in Licence Prices**

There was broad agreement among all interviewees in the four Atlantic DFO regions that licence prices have risen significantly in recent years, and that they are over-priced relative to the revenue generation capabilities of most fishing enterprises. This, in turn, implies great difficulty for new entrants to purchase licences and to make a go of their businesses once they have done so.

There was also general agreement on the principal causes of licence price increases:

1. Some key fisheries have grown significantly in market value, and in a few cases in landed volumes, and these trends have

sparked speculative interest in access rights.

2. For many harvesters, particularly in Newfoundland & Labrador, the TAGS Program in the mid-90s introduced the notion that fishing licences had market value and could be sold for significant capital gains.
3. The Marshall Program had a similar impact in the Maritimes and Québec. There is disagreement whether prices paid by DFO through Marshall were excessively high: some harvester representatives continue to feel DFO is the most significant source of price inflation.
4. With increased demand for seafood products and overcapacity in processing plants, there is growing competition for resource supplies among processors. This, in turn, leads to under-the-table licence purchases through trust agreements. This problem is more acute in Scotia-Fundy and Newfoundland & Labrador. This trend is less evident in the Gulf and Québec where stakeholders are more concerned about licences being transferred from one jurisdiction to another.
5. There is also a growing trend for the wealthier fish harvesters to accumulate licences through trust agreements and to pay higher prices. This is more apparent again in Scotia-Fundy and Newfoundland & Labrador.

A provincial government official in Newfoundland & Labrador stated:

*“Government really caused the whole problem by establishing artificial values for enterprises. There has been escalation in the last five years due to temporary crab permits and growth of the crab fishery.”*

Interviewees referred to a number of negative side effects of rising licence costs, including:

- People are fishing harder to pay off their debts to get in. This is the first generation to carry such high capitalization costs.
- Higher prices mean greater debt and fewer owner-operators, and this will impact negatively on conservation goals.
- Harvesters are less likely now to transfer the licences to their children. It has much greater value now and they can't afford to do that.
- Harvesters are concerned about the capital gains tax, and say they can't afford any more to just give the licence to a son or daughter because of the tax cost.
- In some areas, retiring harvesters are not interested in selling their licences to anyone in the community because they know that they can get the bigger price outside the region.

An independent expert in Newfoundland & Labrador stated that higher licence costs and demographic trends would result in fewer harvesters and greater difficulties finding people to work in the industry. The result will be shrinkage in the labour force all over the Atlantic region.

There were comments in all regions that the only way for a young harvester to acquire an enterprise is to become a “figurehead” for an investor (normally a processor or established enterprise owner) in return for a salary and a guarantee of employment. The new entrant is obligated to sell the landings to the processor at the price that the processor is willing to pay and the processors therefore gain control over shore prices.

It is clear from all commentators that the substantial increase in licence values over the past decade is radically changing the economics of the fishery at the community and fleet level. The bottom line is that the traditional community-based owner-operator fishery in the Atlantic coast is in serious jeopardy.

### 2.3.2. Company Control of Licences

The evidence from the interviewees is that processor control of fishing licences is well-established in Scotia-Fundy and in Newfoundland & Labrador, and growing in occurrence in the Gulf and Québec, despite DFO's Owner-Operator and Fleet Separation Policies.

The problem is one that feeds on itself: processor demand for control of resource supplies drives up licence prices, and the higher the prices go, the less access harvesters have to conventional financing arrangements, and the more they must depend on processors.

There is broad agreement that the traditional reliance of fish harvesters on loans from processors is a normal and healthy component of the fishing economy. Such deals provide harvesters with capital and give the processor greater security of raw material supplies. These arrangements become a problem only when trust agreements result in transfer of control of the licence to the processor.

Processors who were interviewed said that at current price levels for licences, the companies need more collateral, and therefore the trust agreement is a fair exchange. They argue strongly that it is not fair that fish harvesters are often given licences to process and market their own fish while processors cannot buy fishing licences. This unfair advantage is said to be driving many smaller processors out of business unless they can secure raw material supplies through trust agreements or other such arrangements.

Harvester leaders indicate that wealthy harvesters are buying up licences more than processors, and some are starting up processing plants.

A Nova Scotia harvester stated that young harvesters in his area are coming into the fishery with heavy debts and still borrow more money to buy the second licence. He was concerned that sometimes these harvesters become the worst poachers. The trust agreements that do the most damage are the "sharecroppers" – people who will never be outright owners. They don't fish responsibly because they only earn 30% of the value of their catch and have strong incentives to cheat.

An inshore harvester in Québec stated:

*"This trend could well be the end of traditional fisheries. The fisheries seems to be becoming more and more the means for wealthy people to get wealthier rather than being the lifeblood of Atlantic communities like it has been since its beginning."*

A Québec fish processor agreed:

*"Hefty prices and the use of 'figureheads' are creating undesirable effects, such as encouraging investors from other provinces to try to acquire licences from Québec. It is hurting the local economy and jeopardizing jobs. It is also creating a precedent where young fishermen and crewmembers will eventually not have access to licences."*

### 2.3.3. Strategic Policy Options

Interviewees suggested a wide range of options to control licence prices and help young harvesters to purchase enterprises at costs that would not undermine their businesses.

One point of agreement among most harvesters, government officials and independent experts is that the simplest and most direct solution would be to end the increasingly open market in fishing privileges. This could be done by having all licences revert to DFO, or to an independent licensing board, when harvesters leave the fishery. Privileges could then be redistributed to qualified new entrants through a lottery or other arrangement.

The interviewees all recognized however, that most fish harvesters would strongly oppose such a change because it might take away or reduce what they have come to see as their valuable equity in the fishery.

There were positive comments about efforts in Newfoundland & Labrador and in the Gulf to establish fleet-based rationalization processes to consolidate licences and quota in more viable enterprises. The success of such efforts is seen to depend on three key factors:

1. The fleet organizations having access to a pool of capital to purchase licence or quota from retiring harvesters for consolidation and capacity-reduction purposes. Such a capital fund might come from a special allocation of fish or from a levy on sales of fish.
2. Changes would need to be made in the Owner-Operator Policy to allow legitimate organizations representing the collective interests of owner-operators to own and manage licences and quota.
3. The overall market environment for licences and quotas would need to be “calmed down” to the point where the fleet organization is able to purchase licences and quota from retiring harvesters at fair market prices.

Other policy and program options identified by interviewees were:

1. There was virtual consensus on the need to outlaw trust agreements to take pressure from processors off licence prices. Disagreement came from processors who feel the policy is unfair to them unless there are parallel changes with regard to processing licences.
2. There was broad agreement on the need for regulatory changes to make it possible for new entrants to use the licence as collateral for borrowing purposes.
  - Provincial loan boards should be able to lend money for licences and have the Federal Government recognize it as collateral.
  - Banks could repossess licences from defaulters and then DFO would approve resale at fair market value and specify where and who to sell it to.
3. Most interviewees supported a capital gains exemption for licence transfers within families. Some commentators pointed to the need to ensure it is not just a windfall gain for sellers.
4. Several interviewees proposed a special capital fund for qualified new entrants to buy licences at affordable interest rates. It might come from special allocations of offshore fish. It would require Federal-Provincial cooperation because provinces can't afford it by themselves.
  - The government could establish a loan guarantee program for new owner-operators to acquire licences.
5. Fishermen's organizations should be involved in setting fair market value thresholds for licences through a licensing board or council. Retiring harvesters would get a pension, and new entrants would be entered in a draw for licences as they become available.
  - It could be a clearinghouse or advisory group to review licence transfers.
  - Government would need to help build capacity in organizations if they are to play this role.
6. Changes in licensing regulations to allow a young harvester to progressively acquire the fishing enterprise of an older harvester should be explored.
  - In a lobster enterprise, for example, the crewmember could gradually buy lots of traps and fish them with the enterprise head until he or she is ready to take over the entire enterprise.
7. There would be significant tax advantages if the government would allow the licence to be held in the owner-operator's incorporated company rather than only under the individual owner-operator's name.

One area of disagreement is processor concerns about security of resource supplies. Company spokespersons and some government officials identify the need for some mechanisms to provide greater security of supply. The options include:

- Processors being able to purchase fishing licences and/or quota;
- Limits on the export of unprocessed fish;
- No restrictions on trust agreements;
- Collective bargaining arrangements with negotiation of maximum price levels; and
- Processor quotas.

There was no expressed support for any of these options among harvester leaders.

Interviewees in Québec pointed to the success of the capital gains exemption in the province. The Québec Government offers a capital gains exemption on a fishing licence transaction of up to \$500,000. This means that the great majority of retiring harvesters are not taxed on such transactions by the province. This makes it easier for a retiring harvester to sell or give the licence to a son or daughter. The harvester can put a down payment on his son or daughter's loan and be reimbursed once they receive the loan. The Québec Provincial Government also offers a loan guarantee for up to 70% of the licence's market value that makes it easier for harvesters to use conventional borrowing programs.

In short, there are a number of constructive measures that can be taken to manage the inter-generational transfer of licences without undermining the business viability for the next generation of owner-operators. However as long as the "speculative bubble" exists, and licence prices continue to inflate, it will be very difficult to make such measures work in terms of harvester support and participation and access to conventional sources of capital.

#### **2.3.4. Training & Professionalization**

Most interviewees had not given as much thought to this topic. The connection to owner-operator issues and inter-generational transfer was not initially clear for some participants.

Several identified the need for new types of education and training to support more complex and valuable business enterprises. Harvesters need business management training to manage debt, tax policy, high value of assets, and they need to know how to assess the real value of licences.

Others discussed the need for more training and education to support an industry that is increasingly knowledge and technology driven. Harvesters need to learn about conservation and stock management, how to fish for more quality, how to catch less fish with more value.

One harvester in Nova Scotia did not see the need for professional standards or certification for skippers beyond the existing Fishing Master "tickets". He sees the "training gap" as closing quite fast because Transport Canada and the insurance industry may soon require FM IV. He also saw the need for better business management skills. Another harvester agreed that to be an owner-operator you should have a minimum of Fishing Master IV and also have business management training.

A Newfoundland harvester leader expressed growing concern that young people are not doing training because of cost and lack of access in local communities.

*"A lot of these people will soon want to take over family enterprises and won't be qualified. There may then be a backlash against the professionalization system there. Prior learning assessment and recognition (PLAR) is very popular with harvesters as a way to get credit for what they know and not have to pay to go to school. It's been a big success."*

A provincial official in the Maritimes described the need for succession planning and promoting careers in the industry. There is a need to start in schools to convince bright young people in fishing communities to complete their studies and then consider careers in fishery. The provincial government strongly supports professionalization, but needs to make sure industry is on side.

## **2.4. FOCUS GROUPS**

The purpose of the focus groups was to get advice and direction from fish harvesters for the interpretation of findings from the survey research and from the literature review.

The general findings from the focus groups parallel closely the outcomes from the key informant interviews and are reflected strongly in the findings and conclusions set out at the end of this report.

The focus groups did add valuable depth to the analysis regarding the following issues and strategic concerns.

### **2.4.1. Crisis in the Pacific Region**

The fish harvesters who participated in the focus groups and workshop discussions in British Columbia share a strong sense that the current aging generation of owner-operators, and the low numbers of new entrants to the industry, represent a severe threat to the stability and renewal of the fishery labour force and of the coastal communities, including First Nations, which generate and support the labour force. They did not, however, see any easy solutions to these problems barring a fundamental rethinking of current fisheries management policies.

Participants generally felt that their industry is in a precipitous decline and that it offers little future for independent owner-operators. They exhibited a high level of distrust with regard to the fisheries management system, and saw little opportunity for constructive dialogue and partnership in efforts to meet the challenges facing the industry. They expressed a virtual consensus view that government is committed to ongoing fleet rationalization and privatization of fisheries management in the context of shrinking DFO budgets, current land claims negotiations with First Nations and efforts to protect endangered salmon sub-stocks.

In general the focus groups and workshop sessions in BC reinforce the general finding of this study regarding the unique situation in the Pacific Region. Not only is the fishery itself facing economic and conservation challenges, but the fisheries management system does not appear to be capable of supporting dialogue and partnership across the different industry sectors. It is therefore unlikely that DFO will be able in its current orientation to facilitate the consensus building and problem-solving efforts that are needed.

### **2.4.2. Protection of Owner-Operator Policy in the Atlantic**

An overarching concern, reaching across the four Atlantic DFO regions, was the loss of control by harvesters and their communities, of fisheries access rights.

In Newfoundland & Labrador, the major concern was the current state of the crab fishery where there are many harvesters with small quotas who are preparing to leave the fishery due to age and marginal fishing incomes. Processor companies and the larger fishing enterprise owners are aggressively pushing to consolidate control of quota through arrangements that often contravene the Owner-Operator and Fleet Separation Policies. The FFAW that represents fish harvesters across the province is working to set up alternative mechanisms to encourage the transfer of quota to smaller enterprises to improve overall fleet viability. At the time of writing, however, the organization is locked in a major conflict with the processors and the provincial government over the government's effort to impose a system of plant quotas for crab.

In Scotia-Fundy, the major focus of concern is the use of trust agreements to consolidate control of licences against the intent of the Owner-Operator and Fleet Separation Policies. These practices take two forms: fish buyers or processors gaining control of licences by financing harvesters to purchase enterprises as titular owners under trust agreements, or owner-operators themselves accumulating

licences by the same means. Harvesters expressed particular concerns about the potential negative impacts on lobster conservation resulting from high licence prices, the indebtedness of young enterprise heads who pay these prices, and the operation of vessels by captains and crew working on salary.

In the Gulf region, the concerns focussed on high licence prices stemming in part from the Marshall Program to buy and transfer enterprises to First Nations communities. There were also concerns about processor control of licences in areas with strong fisheries, and about the trend for valuable licences to be purchased and moved out of local communities.

In Québec, the major focus of concern was “artificially” high licence prices driven in part by Marshall, and expanding control of licences by processors. A particular focus of concern was licences being purchased and moved out of communities that depend on them for local employment in harvesting and processing. Although the practice is not yet widespread, the occurrence of “figurehead” captains who operate enterprises on behalf of non-harvester owners through trust agreements was a real issue.

#### **2.4.3. The Situation of Crewmembers**

Focus groups with crewmembers and with some owner-operators, agreed strongly that high licence prices make it virtually impossible for young crewmembers to work their way up to captains’ positions unless they are taking over a family enterprise or are strongly backed by a processor or outside investor. It was felt that this situation is making it more difficult to attract young people into the industry, or to keep them once they are there.

The best solutions to this problem were seen to be tax measures and affordable credit, but most participants felt that licence prices would have to come down to more reasonable levels before such programs could be effective.

#### **2.4.4. The Capital Gains Tax**

It was apparent from the focus groups that many enterprise heads, most particularly in Québec and the Gulf but also in other areas, want to pass their enterprises on to family members but feel constrained in doing so by the perceived high levels of capital gains tax. The levels of capital gains tax of course reflect current market prices for licences that fishermen feel in most areas are high relative to the revenues that the licence can generate from fishing. They are aware that they have to recuperate this cost from the recipient of the licence, and may therefore damage the viability of the enterprise for their son or daughter. The policy option most favoured by enterprise heads was a capital gains exemption for transfers within families, and participants in Québec spoke with approval of that program in their province.

#### **2.4.5. Loan Board**

Another point of general agreement across the Atlantic focus groups with regard to remedial action was the need for a strong and effective loan board system capable of accepting licences as collateral for new entrants taking over fishing enterprises. Some participants pointed to the need for the Federal Government to partner in this initiative to administer the licensing issues and to support provinces that have limited fiscal capabilities. Québec participants spoke positively about the role of their provincial government in providing financial supports for inter-generational transfers, but would like to see credit guarantees extended to larger portions of the fleet.

#### **2.4.6. Low Profile of Education and Training**

Participants in focus groups were asked about their interest in expanded education and training relative to the challenges facing their industry. In the majority of cases participants had not thought much about education and training in terms of solutions to human resources and inter-generational transfer issues. With some exceptions, they did not link improvements to fisheries management and conservation to education and training.

The groups did express some interest in improved access to training, particularly for the traditional “captain’s ticket” (i.e. the Fishing

Master programs) and assistance in managing small businesses or participating in fisheries science. The strongest positive feedback about training came from Québec where the professionalization program was heavily cost-supported by the Québec government.

The focus groups suggest, however, that there is a lot of work to be done to encourage fish harvesters to appreciate the potential contributions of education and training for improved viability and sustainability in their industry.

## 2.5. INTERNATIONAL COMPARISONS

This component of the project involved study visits to fishing nations and a review of the relevant literature to assess the relationship between fisheries management paradigms and human resources management in fisheries. The study also identified specific policy and program approaches that go with the different policy frameworks.

### 2.5.1. Fisheries Management and Human Resources Policies

This sector study is centrally concerned with human resources trends and challenges in the fish harvesting industry. However, it is important to clarify at the outset, the important relationship between the fisheries management system and human resources development in the sector.

Some fisheries nations, most notably New Zealand, Iceland and (in a limited way) Norway, put the highest policy emphasis on economic efficiency and productivity to expand overall contribution from fisheries to GDP. To do this, they transfer to industry groups the quasi-property rights for the resource and responsibilities for regulation of fishing activities and enforcement of rules, and focus the government's role on stock assessment and setting sustainable harvesting levels. The goal is to optimize net economic benefits through market-driven, self-financed rationalization of fleets, utilization of the most efficient production methods, and minimization of management costs for government.

This management model emphasizes the rationalization of fleets and reduced numbers of independent participants. Many fisheries in Canada and elsewhere are managed by means of individual quotas (IQs) to achieve goals for economic efficiency, self-regulation and management of production flows. Such IQ systems often place effective limits on ownership concentration by restricting enterprise shares and transferability, and by limiting ownership to professional fish harvesters.

In fisheries that are managed to optimize economic efficiency, such limits are minimized and access rights (licences and quotas) can be traded on the open markets. A recent report advocating this approach for the British Columbia fishery states the case as follows:

*Restrictions on the transferability and divisibility of licences and quotas, their attachment to vessels and other impediments to their flexibility should be eliminated. Rights that cannot be transferred have no market value and cannot be used as collateral. More importantly for long-term economic performance, transferability is essential to allow for reallocation of rights to those who can generate the most value from the resource, and to enable fishers to adjust their production capacities for maximum efficiency.<sup>16</sup>*

Advocates of this approach argue that enhanced industry efficiency generates state and private sector economic surpluses with which to diversify regional economies and create new employment opportunities. In New Zealand, for example, the numbers of quota owners shrank by 39% and the number of independent owner-operators by 40% after individual quota management was implemented across the board in the early 1990s. A parallel trend is for industrial activity and employment to concentrate in the larger fishing centres.

Norway has followed this path but maintains a strict fleet separation policy that prevents vertical integration of harvesting and processing. This has resulted in consolidation of quota ownership by large vessel operators and significant loss of employment in coastal regions, particularly in the north. With relatively healthy cod stocks, the harvesting sector in Norway is experiencing record earnings while the processing industry is in sharp decline because of high fish prices and lack of secure access to raw materials.

<sup>16</sup> *Treaties and Transition: Towards a Sustainable Fishery on Canada's Pacific Coast*, a report and recommendations prepared for DFO and the Government of British Columbia by Donald M. McRae and Peter H. Pearse, May 2004: pp 36-37.

The privatization policies in Iceland and New Zealand still meet opposition from the remaining independent owner-operators, but their respective governments remain committed to this direction. Such policies are perhaps more sustainable in smaller island nations where regional disparities may not be such a challenge. In the New Zealand case a substantial portion of fish quotas is now owned by Maori groups and provides a much-needed economic base for their communities.

## 2.5.2. Policy Aimed at Sustainable Employment

### 2.5.2.1. The European Union

A number of fishing nations or regions formulate their fisheries management policies with a primary focus on maintaining employment and community stability in coastal regions.

These policy approaches are most evident in the European Union. At a 2004 EU conference<sup>17</sup> in Bundoran Ireland to plan the 2007 to 2013 phase of the EU Common Fisheries Policy and the expenditure of the €4.9 billion<sup>18</sup> “Fisheries Structural Fund” there was a clear policy shift away from modernization of industrial fleets towards enhanced management of nearshore fisheries linked to economic diversification in coastal regions. Priorities for the new policy include the following:

*A long-term strategy for integrated development of coastal areas currently dependent on fishing should be considered for implementation after 2006, aiming to:*

- *Recognize the role played by fishermen and other fisheries stakeholders in maintaining the social and cultural heritage of coastal areas, maintaining populations in remote areas where few other economic activities exist, and providing leverage for the development of alternative activities, tourism in particular.*
- *Promote the development of complementary coastal activities which may provide alternative employment on a full-time or part-time basis to coastal populations depending on fishing.*

Communications from the Commission. *The Reform of the Common Fisheries Policy: Roadmap*, Brussels, 2002: p. 20.

- Improvement of product quality;
- Introduction of “resource-friendly” fishing methods and gear;
- Improvements in living and working conditions;
- Development of alternative economic activities for harvesters and their communities to diversify employment and augment incomes;
- Improvements in infrastructure and basic services in coastal populations;
- Training and financial incentives for young people to become owner-operators of coastal fishing enterprises; and
- Creating capacity for local fisheries renewal and improved management.

The report from the Bundoran Conference contained recommendations that the European Fisheries Fund invest in initiatives to integrate fisheries management decision-making with programs of socio-economic development in coastal areas, and target interventions on smaller communities and small-scale enterprises that are key economic contributors in isolated coastal regions.<sup>19</sup>

EU Commission consultations associated with the policy renewal process in the EU have shed light on the emerging issue of labour shortages. While efforts to cut capacity in offshore fleets continue, the EU Fisheries Directorate now estimates that the number of harvesters rendered unemployed by the scrapping of vessels is now far less than the vacancies generated by retirement of older harvesters.<sup>20</sup>

<sup>17</sup> *Steering Towards 2007-2013*, a conference conducted by the European Commission Directorate-General for Fisheries in Bundoran Ireland, May 27-29, 2004.

<sup>18</sup> Approximately \$7.8 billion Canadian.

<sup>19</sup> European Commission, Directorate-General Fisheries, *Conclusions of the Conference ‘Steering Towards 2007-2013: What Financial Support for the Common Fisheries Policy and Coastal Zone Development’*, Brussels, 2004: p. 2.

<sup>20</sup> Commission of European Communities, *Action Plan to Counter Social, Economic and Regional Consequences of the Restructuring of the EU Fishing Industry*, Brussels, 2002: p. 9.

A major new initiative by the EU Commission involves a large-scale research project to establish rigorous socio-economic criteria to identify fisheries dependent communities and regions across Europe. This is a prior step to the development of policy and program instruments and investment strategies to stabilize and develop such regions.<sup>21</sup>

In short, the new direction for the EU fisheries policy is to integrate fisheries management programs and systems more fully with social and economic development at the local level in coastal regions. The overall goal is stabilization of coastal regions linked to rebuilding fish stocks and habitat and achievement of sustainable harvesting levels.

At the Bundoran Conference representatives from several fishing nations drew attention to human resources issues. Speakers for Denmark, the United Kingdom and Ireland described the loss of population from coastal regions and the lack of young people coming into the industry as the greatest threats to their national fisheries.

To address looming shortages of skilled labour, Denmark and Scotland have already introduced formal apprenticeship systems and training has been proposed as a new investment priority for the EU Fisheries Directorate. The targeted areas for new training initiatives include fisheries management processes, sustainable utilization, quality improvement and safety.

*Small-scale fisheries [vessels <12m] deserve special consideration because they represent 75% of the total number of EU fishing vessels and 44% of employment in the harvesting sector while their contribution to the total catch is in the order of 20%.*

*...Since competition with bigger and more efficient vessels is one of the main problems, member states could help to protect efficient small-scale fisheries by measures other than financial aid, such as reserving certain coastal areas (the 12-mile zone for instance) to small scale fleets, or reserving to these a certain share of the national share of fishing effort.*

*To maintain employment in coastal areas and to mitigate the socio-economic impacts of multi-annual management plans in coastal areas most dependent on fishing, the structural aid regime could also be adapted to the needs of small-scale coastal fleets*

*Commission of European Communities, Action Plan to Counter Social, Economic and Regional Consequences of the Restructuring of the EU Fishing Industry, Brussels, 2002: p.16.*

#### **2.5.2.2. The United States**

While many key fleets within the United States fishery are managed by individual quotas, there is growing opposition from industry and community groups, and from state governments including Maine, Massachusetts and Alaska, to expanding transferability and encouraging concentration of ownership. The major concern is loss of employment and community viability in coastal regions.

An excellent example of fisheries policy oriented towards employment and community stability is found in Alaska. The State government is committed to maintaining the fishery as an economic base for a widely dispersed coastal population including Native people. The major fishery, salmon, is managed on a competitive, common property basis with controls on fishing effort. The fishery operates under a strong owner-operator policy that restricts ownership of licences to professional harvesters. This applies equally to those fleets managed under individual quotas. Regulations require the holder of the IQ to be on board the vessel during all fishing operations.

Alaska fish harvesters have been hit hard by declines in salmon stocks and the worldwide competition from salmon aquaculture. The introduction of limited entry licensing and then the Individual Fishing Quota (IFQ) program for halibut and sablefish had the consequence of leaving small communities that had been dependent on these fisheries without access to the quota. New programs aimed at assisting harvesters to maintain viable enterprises and to provide a stable economic base for small coastal communities have since been put in place.

A Commercial Fishing Loan Fund has been established by the Department of Community and Economic Development to provide long-term, low interest loans to harvesters and "community entities" to purchase gear, permits and quota and to maintain commercial

<sup>21</sup> Commission of European Communities, *Regional Socio-economic Studies on Employment and the Level of Dependency on Fishing*, MegaPesca Portugal and Centre for Agricultural Strategy UK, February 2002.

fishing vessels. The assets being financed serve as collateral for the loan. Loans will only be issued to individuals who are established Alaska residents, own a captain or crew licence and demonstrate professional commitment to the fishery.

The Alaska State government recently enacted legislation to support the creation of “community quota entities” (CQE).<sup>22</sup> These will be non-profit, community-based groups formed to purchase quota and limited entry licences and lease them out to eligible members of the community. To qualify for this program, communities must have less than 1,500 residents and show an historic attachment to the halibut and sablefish fisheries.

### 2.5.2.3. Shetland Islands

Another interesting example of employment and community oriented fisheries management is found in the Shetland Islands in Scotland. Access to substantial local government revenues from North Sea oil transshipments gave the community of 22,000 people a tool with which to develop their fishery according to their own priorities.

Working through their Producer Organization established under the EU fisheries management framework, the industry used capital from the local government’s investment fund to buy up fishing capacity within the United Kingdom national quota. Island fishermen now control almost 20% of the United Kingdom fishery and have put in place mechanisms to maintain permanent control of their fleet in local hands. The Producer Organization owns the licences and makes them available to Shetland harvesters under an owner-operator policy. Most vessels – including large, state of the art deepwater trawlers – are owned and operated by harvesters through small co-operatives or limited companies.

The Shetland Islands provide an example of a highly productive fishery, including offshore vessels, which is structured and managed to optimize local employment, incomes and community stability on a long-term basis. This has been achieved in large part because of local access to investment capital from offshore oil royalties. The policy consensus in the Shetlands is summed up in the often-heard statement: “the oil industry is for three generations, the fishery is forever”.

### 2.5.2.4. Norway

As mentioned above, Norway has a fisheries management system built around the twin pillars of individual quota management and fleet separation.<sup>23</sup> Revenues from offshore oil have been used to support investment in fleet modernization as well as aquaculture development in remote coastal regions.

A distinctive feature of the Norwegian fishery is the extent to which control of fisheries management has been transferred from government to the national organization of fish harvesters, *Norges Fiskarlag*. While it started as a union of fishing captains, it now operates largely as an association of vessel and quota owners. Through a council with representatives of fishing communities and environmental groups, *Norges Fiskarlag* receives scientific advice on fish stocks and develops fisheries management plans and policies to regulate the fleet.

Small coastal fishing enterprises operate largely outside *Norges Fiskarlag* and have been attempting to influence management policy to address their concerns about fleet and community sustainability. Many coastal communities, particularly in the North, have lost access to fishing opportunities because of consolidation of licences and quotas among large fishing enterprises. The small boat harvesters are actively lobbying for a share of the cod and other groundfish quotas to be allocated to their sector, but face a difficult situation because of the stronger position of *Norges Fiskarlag* relative to the government.

One interesting innovation in Norway is the proposed allocation of a “nursery quota” for cod to allow new entrants to access fishing opportunities at manageable cost until they build up their enterprises and can afford to buy into the fishery.

<sup>22</sup> Bill SB 387 passed on June 3, 2004.

<sup>23</sup> Information about the Norwegian fishery was gathered during an in-country visit and meetings with government officials, community leaders and harvester organizations.

### 2.5.2.5. France

Again within the European Community framework, France provides another example of how public policy instruments working in partnership with industry organization can support the sustainability of fisheries in coastal regions.<sup>24</sup>

In France, regional offices of designated Professional Fisheries Organizations issue fishing licences. These organizations are responsible for regulating the number of new entrants and, consequently, the management of the resource.

To become an owner-operator, a fish harvester must purchase a vessel with a licence attached and obtain a designated fisheries certification through a four-week professionalization course. A harvester cannot build a boat without a licence and getting a licence is difficult because of strict limits on the number and catching capacity of vessels. However, licences are included in the purchase of a used boat. With a few exceptions, a fishing licence allows you to fish any product. The price of an actual licence is negligible but the cost of the vessel can be very high because of the fixed limits on their numbers. Even very old vessels are very costly because they represent access to fisheries, and this is a problem for a new entrant who has to pay a high price for a vessel that may not be very productive.

To help young harvesters acquire vessels and fishing licences, and thereby support the renewal of the fishing profession in France, the government has established three key support programs.

- **SOFIPECHE**  
This program is run by the Credit Maritime (an industry based investment fund and credit agency) and a few private banks to help finance new entrants in the midshore fleet. The financial institutions recruit private sector investors (individual investors or companies) to help finance the purchase of fishing boats in exchange for generous tax incentives from the government. The private investors can own up to 49% of the shares of the fishing boat. The young harvester who is becoming an owner-operator for the first time will need to own at least 51% of the shares for at least five years, and will have to pay back the other investors with interest over a fixed time period.
- **Tax Reductions**  
This law grants the young harvester who purchases an enterprise for the first time an allowance of 50% for 60 months on the taxable income generated as an individual owner-operator or within a fishing company.
- **Retirement Program**  
Fish harvesters also have access to a national retirement program financed by government loans. This program allows older harvesters to leave the profession and encourages the hiring of youth to take over the enterprises.

### 2.5.3. Lessons Learned from International Comparisons

This brief review of fisheries policies in other countries suggests that there are a variety of mechanisms to achieve goals of stability and sustainability in community-based fisheries. The critical factor is the larger policy orientation of the national government or international agency that regulates the fishery.

In fishing nations that are committed to industry rationalization and consolidation of ownership and control of fleets, management by means of individual transferable quota systems appear to lead directly to that outcome.

In situations where governments set out to promote the sustainability of coastal fisheries within a larger commitment to socio-economic stability and development in coastal regions, some key success factors appear to be:

<sup>24</sup>Information about the fishery in France was gathered during an in-country visit and meetings with government officials, community leaders, financial agencies and harvester organizations.

- The willingness and ability of governments to adopt fisheries management policies and practices that are consistent with their stated objectives for social-economic stabilization and development;
- The direct and effective involvement of strong industry and community organizations that are able to partner with government and to play a hands-on role in the management of complex regulatory and financial systems to support local fleets;
- Access to significant funds of capital from government or industry sources; and
- Linkages between fleet self-management and education and training systems and requirements.

It must be pointed out, however, that each fishing nation seems to follow a unique development path that reflects the unique circumstances of the fishery and the history and culture of their fishing people. Sometimes governments lead the way, but often it is industry organizations and fishing communities that are the source of energy and direction.

It is not at all clear that models that work in one situation will be transferable to another, although there is much more to be learned from such international studies and comparisons.

## 2.6. FINANCIAL ANALYSES

It was recognized at the outset of this project that the financial viability of fishing enterprises and fleets, and the workings of markets for access rights (quotas and licences), are critical determinants of the labour force supply and demand in owner-operator fisheries. To contribute to a clearer understanding of these factors, the project undertook five discrete sub-studies related to the financial aspects of inter-generational transfer of fishing assets:<sup>25</sup>

1. An overview paper on current tax policy and its implications for inter-generational transfers of fishing assets.
2. Case studies of individual owner-operator enterprises of different types in different fleets to generate detailed information on current market values for enterprises and the issues involved in purchase and sale.
3. A sensitivity analysis to assess the vulnerability of fishing enterprises to changes in financial conditions, and the impacts of such changes on viability, valuation and financing of acquisitions.
4. A valuation model to serve as a guide in determining the market values of fishing enterprises.
5. A legal opinion on the applicability of the professional incorporation model for owner-operators of fishing enterprises.

### 2.6.1. Case Studies

Eight case studies were completed in different locations and fleets on both coasts. Each involved a situation where a harvester was attempting to purchase a fishing enterprise (licences, vessel, gear and sometimes fish quotas). The circumstances of these enterprises varied widely as did their financial profiles and market values.

The studies revealed that individuals attempting to become owner-operators face substantial financial barriers. The first and most significant is the cost of licences in most fisheries. For the eight case studies, fisheries licence prices ranged from \$100,000 in relatively low income fisheries to \$3.5 million in lucrative midshore fleets. The average was just over \$1 million. At such price levels it is difficult, if not impossible, for young crewmembers with limited financial resources to buy in. This problem is exacerbated by the fact that financial institutions cannot currently accept fishing licences as collateral for loans because of their legal status as intangible assets.

Sale of their fishing assets is often the primary source of retirement income for older harvesters, and helping a son or daughter to take over the enterprise may seriously shrink this source of income security. The case studies indicate that capital gains taxes can amount to

<sup>25</sup> The financial analyses were carried out by principals of Dockrill Horwich Rossiter Chartered Accountants in Halifax, NS, a firm with expertise in the fisheries field. They in turn acquired legal advice on taxation and incorporation issues from Wyman Webb, LLB, of Patterson Palmer Atlantic.

hundreds of thousands of dollars and thereby limit the willingness or ability of parents to transfer their licences to offspring.

The case studies confirm that these limits on the capacities of young harvesters to raise capital within their families or from conventional borrowing sources can make them dependent on processing companies and other sources of capital that directly or indirectly undermine owner-operator fisheries. Such reliance on fish processors or other outside investors may have long-term implications for the sustainability of community-based, owner-operator fishing enterprises.<sup>26</sup>

### 2.6.2. Policy Analysis

The financial overview report draws upon evidence from the survey and interview research and the case studies to address the financial and tax policy issues associated with inter-generational transfers of fishing assets. It found evidence of substantial upward pressure on licence prices, and expressed concern about the future viability of owner-operator businesses that are purchased at such price levels. The principal remedy to this problem was seen to be the effective enforcement of existing policies on the East Coast, and changes in current licensing policies in the Pacific Region.

*The enforcement of the Owner-Operator Policy and Fleet Separation, and non-acceptance of trust agreements transferring the rights to the use of licences, would eliminate demand from those other than new entrants, crew and family. Fair market value would then be driven more on the economic viability of the enterprise and less on other market based transactions.<sup>27</sup>*

The report also recommended changes in tax law and adjustments in DFO regulations to allow fish harvesters to incorporate and to transfer ownership of licences to their incorporated businesses. There were further recommendations in the areas of:

- Regulatory changes to allow licences to be used as collateral by purchasers;
- Development of a federal loan board for fish harvesters parallel to the existing Canada Farm Loan Board; and
- The development of fleet or community-based investment funds to facilitate inter-generational transfers of fishing assets.

### 2.6.3. Sensitivity Analysis

As a follow-up on the issues raised by the surveys and case studies, and by the policy analysis, the researchers were directed by the Project Advisory Committee to undertake a more detailed analysis of business viability parameters for fishing enterprises. The sensitivity analysis estimates the varying impacts on enterprise viability generated by changes in gross catch value, operating costs, cash flow, the purchase price of the enterprise, and interest rates.<sup>28</sup>

The startling conclusion drawn from this analysis is that, at current market prices for licences, none of the ten enterprises examined was a sound investment in terms of future business viability. All were extremely vulnerable to risk in terms of reduced fish landings or prices, increases in interest rates, etc. The problem in each case was that the initial cost of acquiring the enterprise, and the resulting level of interest cost, put the enterprise in jeopardy from the outset.

The study concludes with the following comment:

*It is apparent, from the analysis of the case studies of enterprise value, that there is a gap between the expectations of the current owners of an enterprise and what new entrants can afford, based on the income being generated by the business. Although we cannot say that this is true across the entire industry, evidence of its existence is substantial, from both these Case Studies and from the survey results.<sup>29</sup>*

### 2.6.4. Enterprise Valuation Model

To assist fish harvesters – both prospective sellers and purchasers – in determining the “fair market value” of a fishing business, the financial experts employed in this project prepared a valuation model specifically for owner-operator fisheries.<sup>30</sup> The model is premised on the

<sup>26</sup>Data from the case studies is further analyzed in the additional financial studies described below.

<sup>27</sup>See the background report for this study: *Policy Analysis: Facilitating the Transfer of Enterprises within Canadian Fisheries*: p. 25.

<sup>28</sup>As well as the eight case study enterprises, the sensitivity analysis made use of financial data from the research literature on two additional enterprises to provide a total of ten enterprise profiles.

<sup>29</sup>See the background report for this study: *Financial Sensitivity Analysis for Fishing Enterprises*: p. 7.

understanding that the purchaser is an owner-operator harvester who will have to carry the ongoing debt costs arising from the purchase out of the revenues generated in the business itself. However, the authors recognize that other “special interest purchasers” can pay above fair-market prices for such enterprises:

*The acquisition of fishing privileges by processors, affluent harvesters and government would be considered to be acquisitions by Special Interest Purchasers. Consolidation of the industry, stacking licences and buy backs are often completed using valuation criteria other than economic viability and with a differing perspective on cash flow and risk.<sup>31</sup>*

The analysis indicates that, to the extent that such special interest purchasers participate in markets for access rights, price levels may rise beyond the financial reach of new entrant harvesters.

The enterprise valuation model report is provided as a practical tool to be used by fish harvesters in their business decision-making.

### **2.6.5. Professional Incorporation<sup>32</sup>**

Fish harvesters are currently allowed to incorporate, but they cannot hold their most valuable assets – their fishing licences and quotas – in the corporation because that would contravene DFO’s Owner-Operator Policy. Incorporation as a professional, an option that is now available to other occupational groups, would provide an approach that is consistent with the Owner-Operator Policy.

The approach first requires a system to qualify an individual as a professional harvester by means of standards set out by a governing body for the profession. The qualified individual could then determine if it is beneficial to transfer a particular licence to a corporation or have their corporation directly acquire such a licence. The regulations would provide that all the voting shares of the corporation holding the licence would have to be legally and beneficially owned by the particular individual (i.e. the harvester owner-operator).

The regulations would provide that the corporation could not transfer or assign the licence to any person without the consent of DFO and could not hold the licence in trust for any other person. The regulations would also provide that the corporation could not allow any other person to use or obtain the benefit of the licence. This will ensure that the corporation remains the legal and beneficial owner of the licence.

If harvesters are allowed to incorporate as professionals, they will be able to realize the tax advantages of carrying on a business through a corporation; i.e. the small business tax rate payable by the corporation on active business income, the capital gains exemption available for qualified small business corporation shares, and income splitting with other family members. This can be accomplished without jeopardizing the owner-operator basis of the fishery.

## **2.7. COMMUNITY CASE STUDIES**

The purpose of the community case study was to examine and compare the impacts of changes in the fishery on the communities that support the industry. By the same token, the case studies make it possible to identify wider trends in rural-coastal regions that have implications for current and future labour force conditions in the industry.

The information for the case studies comes from the 2001 Census, research literature and interviews with key informants in the case study communities.

The seven communities selected for the case studies represent quite different situations. They were chosen to highlight the state of fishing regions in different parts of the country and to provide indications of common trends and policy challenges. The major characteristics of the selected communities are summarized in the following table.

<sup>30</sup> See the background report for this study: *The Valuation Model for Fishing Enterprises*.

<sup>31</sup> *Ibid*, p. 1.

<sup>32</sup> See the background report for this study: *Legal Model for the Professional Incorporation of Fish Harvesters*.

Community	Description
Burin Peninsula, Newfoundland & Labrador	<p>This region was heavily impacted by the groundfish collapse in the 1990s. It was home to a large offshore fishery that remains closed since 1994. Total population fell by 17% over the 1991 to 2001 period with a 28% decline in fish plant jobs and an 11.5% fall in harvesting jobs.</p> <p>The fishery still provides 26% of all jobs in the region. The resilience of the fishery on Burin Peninsula is explained by the fact that the inshore sector expanded significantly, largely on the basis of shellfish, to offset employment losses in offshore groundfish. Very recent stock declines and structural issues in the processing sector now threaten the stability of the critically important crab industry.</p>
Southwest Nova Scotia (LFA 34)	<p>The LFA 34 zone has recently been the most stable and productive fishery in Canada based largely on a lucrative lobster industry. Total population in the area remained stable over the 1991 to 2001 period. The fishery generates a quarter of all jobs in the region. Harvester employment was stable over the 1991 to 2001 period (approximately 3,800 jobs) but fish plant workers decreased by 44% reflecting the impacts of the groundfish collapse.</p>
Southeast New Brunswick (LFA 25)	<p>The LFA 25 region is experiencing a decline in lobster stocks on which most harvesters depend. Population growth and economic improvement in the region is being driven by strong economic growth in nearby Moncton. The region has a significant Native population with an expanding fishery.</p> <p>Harvester employment has been stable (some 1,250 jobs) while plant jobs fell by 9% over the 1991 to 2001 period. Declining lobster stocks now threaten enterprise viability, and the Maritime Fishermen's Union has initiated a community-based fisheries restructuring program to reduce fleet capacity and to help rebuild stocks.</p>
Les Îles de la Madeleine, Québec	<p>The Island's economy was hit hard by the downturn in the groundfish fishery. Harvesting employment fell by 12% (to 935 jobs), and processing by 30%, over the 1991 to 2001 period. However, the community has benefited from an improved lobster fishery and by industry involvement in protecting and enhancing fish stocks and habitat. Harvester incomes have improved and, with support from the provincial government, the pattern of inter-generational transfer of fishing enterprises is positive compared to other regions.</p>
Nunavut	<p>Nunavut became a separate political entity in 1999 through a federal land claim agreement with the Inuit people who make up 85% of the population. The commercial fishing industry in the Territory is very small: in 2001 there were only 55 harvesters and 65 plant workers in the Territory, accounting in total for less than 1% of the labour force. The fishing industry labour force in 2001 was over 85% Inuit.</p>

Community	Description
	<p>Nunavut's government is working to expand the fishery. The Territory currently lacks boats, docking facilities and other infrastructure for the fishery. Nunavut owns offshore quotas that currently have to be fished by boats from outside the Territory in exchange for royalties and seasonal employment for Inuit crewmembers.</p>
<p>Province of Manitoba</p>	<p>The freshwater fishing industry in Manitoba represents about 70% of the fish harvester labour force in the Prairie Provinces and the Northwest Territories. In 2001 there were 1,005 fish harvesters in Manitoba,<sup>33</sup> with another 345 people involved in fish processing and aquaculture. There was a 25% decline in harvesting employment over the 1991 to 2001 period.</p> <p>Nearly 50% of the fish harvester labour force in Manitoba fishes on Lake Winnipeg. In the north, this fishery is conducted mainly by Aboriginal fishers and is constrained by high transportation and other costs. At the south end of Lake Winnipeg, the industry is centred in Gimli, a well-established fishing community.</p> <p>Major challenges for Manitoba harvesters are low fish prices and the pollution of Lake Winnipeg. Fish harvesters are also critical of what they see as a failure by the Manitoba government to promote the economic potential of the fishery.</p>
<p>Prince Rupert, British Columbia</p>	<p>Prince Rupert is a city of about 15,000 on the north coast of British Columbia, about 40 kilometers south of Alaska. It is located near the mouth of the Skeena River, BC's second biggest salmon-producing river. The city had a Native population of 3,055 in 2001, and Native people are very active in both harvesting and processing. The Northern Native Fishing Corporation owns and leases 254 licences in the region.</p> <p>The community has experienced setbacks in forestry, pulp and paper and the fishery. Between 1991 and 2001, the working age population in the city dropped by 11.5%.</p> <p>The local fishery was devastated by the changes in the 1990s. From 1991 to 2001 the number of harvesters fell by 32% (from 515 to 350), and processing employment declined by 54%.</p> <p>With only 860 individuals listing an occupation in the fishery in 2001, the fishing industry's importance in the occupational mix in Prince Rupert dropped significantly – from almost 15% in 1991 to just below 10% in 2001.</p>

<sup>33</sup>This estimate from the Census differs from that of the Freshwater Fish Marketing Corporation (FFMC), which identified 1,957 fishers in Manitoba in 2003. The FFMC is the Crown Corporation that markets much of the fish landed by commercial harvesters in the Prairie Provinces.

In summary, the situations across the seven case studies range from relatively stable and prosperous to crisis conditions. In the Pacific and Atlantic coastal communities with substantial commercial fisheries, the common trends are decline of fish processing employment and concerns among key informants about loss of control of access rights. The loss of licences and access to fish quota has been most dramatic in Prince Rupert.

The following table presents some key information about labour force trends in five of the case study communities that have large commercial fisheries. It perhaps points to larger trends in coastal-rural regions across Canada.

**TABLE 39: PERCENTAGE CHANGES IN SIZE OF LABOUR FORCE IN CASE STUDY COMMUNITIES, CENSUS DATA, 1991 & 2001**

	Burin Peninsula, N&L	LFA 34, NS	LFA 25, NB	Les Îles de la Madeleine, Québec	Prince Rupert, BC
Total Labour Force					
15 years and Over	-5.2%	-3.0%	5.9%	-7.0%	-11.5%
Total Labour Force Aged 15 to 34					
	-31.4%	-26.5%	-22.1%	-39.9%	-31.8%
Fish Harvesters Labour Force Aged 15 to 34					
	-32.8%	-27.4%	-21.8%	-51.0%	-38.6%
Total Fish Harvester Labour Force					
	+10.7%	+4.7%	+2.0%	-8.5%	-34.0%
Fish Processing Labour Force					
	-28.0%	-44.3%	-8.9%	-29.7%	-53.8%
Total Fisheries Labour Force					
	-14.2%	-12.3%	-5.8%	-13.5%	-51.6%

This information in the above table suggests some general observations about current trends in fishery dependent coastal regions.

1. All the case study communities have seen a decline in the size of the labour force over the 1991 to 2001 period. However, these changes do not appear to be of great magnitude, particularly when we consider the scale of the fisheries crisis in most areas. The data suggest some resiliency in coastal-rural labour markets generally.
2. There is, however, very dramatic and widespread decline in the proportion of the labour force 15 to 34 years of age. This speaks to such wider trends as falling birth rates, the out-migration of young people from rural communities and the shrinking numbers of new entrants to fishing and other trades occupations.
3. Again the size of the total fish harvester labour force did not change dramatically despite the fisheries crisis on the East Coast. In Prince Rupert there was a sharp drop in fishing employment reflecting the more far-reaching consequences of fisheries restructuring in the Pacific Region.
4. The significant decline in the number of fish harvesters in the 15 to 34 years age bracket mirrors the trends in the overall labour force in these communities.

5. The fish processing sector has been very hard hit by changes in the industry generally over the 1991 to 2001 period, and accounts for the bulk of employment losses in the fishing industry overall.
6. For most of the information presented in the table Prince Rupert stands out in terms of negative trends. This confirms the overall finding of the study that the human resources situation in the Pacific Region is much more problematic than on the Atlantic coast.

# 3 CONCLUSIONS & STRATEGIC ISSUES



## 3.1. BACKGROUND ASSUMPTIONS

Before presenting findings and conclusions, it is important to establish the context in which the study has been conducted and certain basic assumptions about the unique nature of the industry being examined.

### 3.1.1. The “Ecology” of the Fishery

The Canadian Council of Professional Fish Harvesters is the national sector council for the largest and most productive sector of the Canadian fishing industry, i.e. that made up predominantly of community-based, owner-operator enterprises.<sup>34</sup> This study is about the current and future labour force needs of that sector.

The starting point in any consideration of public policy regarding the fishing industry is to recognize that the industry exists to exploit a renewable common property resource located in common property marine habitats.

Some fisheries economists and policy analysts argue that, from a public interest perspective, such an industry should be structured to achieve the maximum sustainable contribution to gross national product by pursuing optimal levels of economic efficiency and competitiveness.<sup>35</sup> This perspective supports fleet rationalization, consolidated control of access rights and vertical integration, following patterns well established in agriculture and forestry.

Leaders from the industry sector represented by the CCPFH generally see this perspective as a threat to their interests as small business operators based in rural-coastal regions. They identify a series of additional public policy objectives that need to be taken more fully into account in deciding how best to structure and manage the fishing industry. These include:

1. The need to have an industry structure appropriate to the sustainable utilization of marine resources in terms of scale of activities, appropriate technologies, adaptability to natural cycles of abundance, and reduction of financial pressures or incentives to over-exploit resources.
2. The need to recognize that many owner-operator fishing enterprises are extremely productive and efficient, and that the real issue is expanding competition for or control over valuable fish resources rather than improvements in economic efficiency.
3. The public interest to maintain the population base in rural coastal regions, in turn requiring an economic base to support incomes, employment, and viable communities in terms of services and amenities.
4. The national interest to sustain First Nations and Inuit peoples, French speaking communities, and other unique ethnic and cultural communities in coastal regions.
5. The need to recognize the rights of coastal communities arising from historical dependency and adjacency relative to marine resources that have been harvested for generations, or for millennia in the case of First Nations and Inuit peoples. The adjacency principle is recognized in the United Nations Convention on Law of the Sea to which Canada is a signatory. Historical dependency and adjacency are established elements of DFO access and allocations policies.<sup>36</sup>

Public policy debates about fisheries management tend to focus most on two issues: the balance between economic efficiency and employment; and the tension between conservation and wealth production. Because this study starts from a concern with the maintenance and renewal of the labour force, it brings another perspective to bear. As the following diagram illustrates, the sustainability

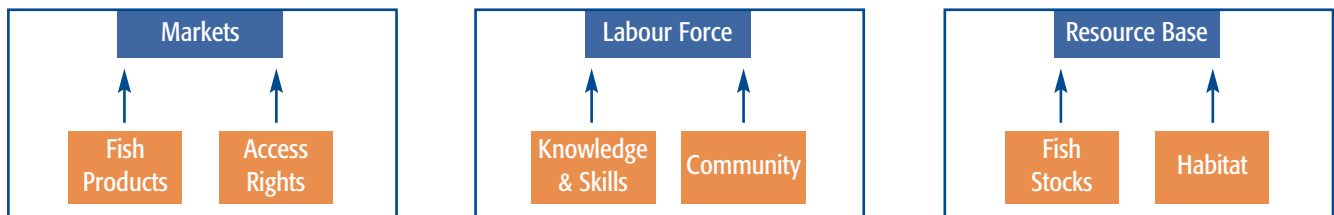
<sup>34</sup>This statement reflects the findings of the CCPFH Phase I Sector Study Report, *Taking Our Bearings*, op cit.

<sup>35</sup>See the Pearse-McCrae, op cit. This policy position is also put forward by the Fisheries Council of Canada representing the larger processor interests in the industry.

<sup>36</sup>*The adjacency criterion is based on the explicit premise that those coastal fishing communities and fishers in closest proximity to a given fishery should gain the greatest benefit from it, and on the implicit assumption that access based on adjacency will promote values of local stewardship and local economic development... The historic dependence criterion is based on the premise that fishers who have historically fished a particular stock should enjoy privileged access to that resource to ensure their continued economic stability and viability, as well as that of the coastal communities from which they come.* See Section 9.2.1 of the report of the Independent Panel on Access Criteria, a sub-component of DFO's Atlantic Fisheries Policy Review.

of community-based, owner-operator fisheries depends upon the interactions of three critical elements: markets forces, the labour supply and the resource base.

Diagram 1: Sustainability of Fisheries



Each of the three elements is itself shaped by internal dynamics:

- The stable growth of fisheries markets involves shifting levels of demand or value for both fish products and the rights of access to fishing opportunities.
- The sustainability of the industry requires a labour force with highly specialized knowledge, skills and aptitudes, and the ongoing availability and “reproduction” of the labour force is in turn dependent on viable communities in adjacent regions.
- All industry activity depends on the supply of commercially valuable fish resources in the context of a stable eco-system including habitat and non-harvested species. (Assumptions regarding resource supply issues are discussed in greater detail below.)

Over the past 30 years the fishing industry has generally been characterized by shrinking fishing opportunities and an oversupply of labour in most coastal-rural regions. This study presents substantial evidence that the labour force can no longer be taken for granted in terms of the continued availability of people in the right places with the right skills and aptitudes. At the same time, it will be argued below, the labour force challenges cannot be resolved independently of changes in fisheries management and other policy systems to ensure overall sustainability of the industry.

In summary, this study begins with the people and community dimensions of the fishing industry and from that perspective, addresses fisheries management objectives and systems.

### 3.1.2. Resource Supply Issues

Readers of this report should bear in mind a significant limitation of the study. The level of current and future demand for human resources in the fishing industry is a direct function of the state of key commercial fish stocks and of market prices for seafood products. This study did not include a rigorous assessment of longer-term resource supplies or market trends.

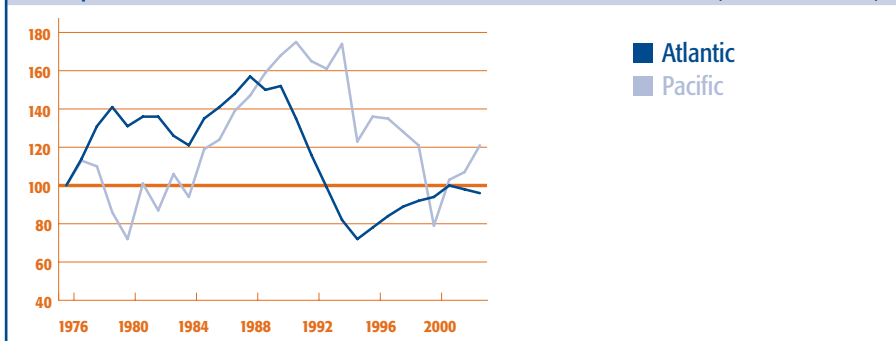
During the course of the study it has been evident that conditions in the fishery are very dynamic:

- Recent runs of some major salmon stocks in the Pacific Region have been strong although there are serious mortality issues in the Fraser River;
- Harvest levels for even the most abundant Pacific salmon runs are unpredictable due to management decisions to restrict fisheries to protect weak stocks that intermingle with strong ones;
- Prices for West Coast salmon have recovered somewhat from the major drop in the early 1990s due to competition from aquaculture production;

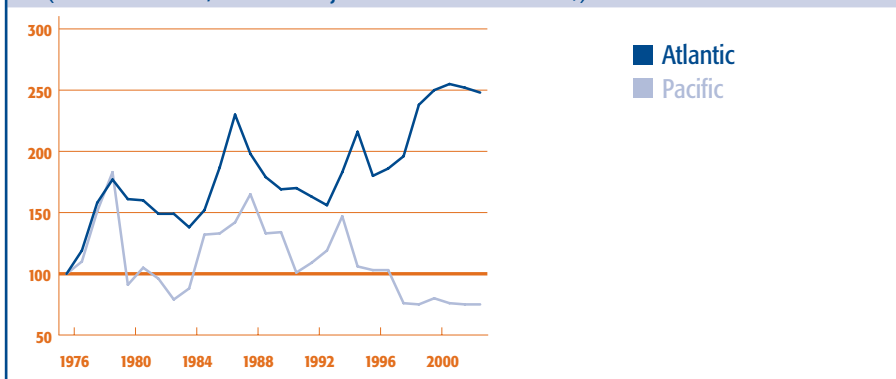
- Shrimp prices on the Atlantic coast fell sharply in 2004 due to global oversupply;
- There have been recent cuts in total allowable catches (TACs) for snow crab in Newfoundland in response to falling catch levels;
- Lobster stocks in some parts of the Southern Gulf are in serious decline while other areas of the Gulf are seeing strong landings and prices;
- Cod stocks in the northern Gulf of St. Lawrence appear to be rebuilding, while recovery for northern cod is limited to a relatively small portion of the total stock area;
- Haddock stocks in southwest Scotia-Fundy are strong while cod stocks remain at depressed levels;
- Lobster landings and prices in southwest Scotia-Fundy are strong despite concerns about high catch rates; and
- The industry as a whole has been impacted by the higher Canadian dollar and new security and food safety requirements for exports to the United States.

There is no readily available and comprehensive analysis of where these and other trends will take the industry in the future. The following graphs shows landings and landed values for the East and West Coast fisheries from 1976 to 2003 on an indexed and constant dollar basis.

Graph 3: Landed Volume, Atlantic and Pacific Fisheries, 1976 - 2003 (Index 1976=100)



Graph 4: Landed Value, Atlantic and Pacific Fisheries, 1976 - 2003 (Index 1976=100, Inflation adjusted to 1992 Constant \$)



Three important observations arise from this information:

1. Total fish landings by volume on both coasts are close to levels in the mid-1970s after sharp declines in the 1990s. On the Atlantic coast, however, the species composition of the total catch has shifted dramatically from groundfish to shellfish.
2. Landed values have consistently trended upwards in Atlantic fisheries reflecting growth in both landings and value of shellfish.
3. Total landed value for Pacific fisheries has trended downwards since the early 1990s reflecting both reduced landings and uncertain markets.

There is no basis for assuming that landed volumes are stabilized or sustainable at current levels. A somewhat safer view would be that the instability will continue, with some stocks up and others down. The best case scenario might be a dynamic equilibrium over the medium to long-term.

Our operational assumption in this study therefore is that these larger trends will continue with significant fluctuations in major commercial stocks, but with some optimism for improved market conditions for Pacific salmon and gradual rebuilding of groundfish stocks on the East Coast.

It will be borne in mind throughout the following analysis that there is perhaps a higher level of risk associated with any kind of analytical conclusions or policy prescriptions for the fishery than is the case in other industries.

## **3.2. THE CHANGING ECONOMY OF THE FISHERY**

### **3.2.1. The Position of Owner-Operator Fisheries**

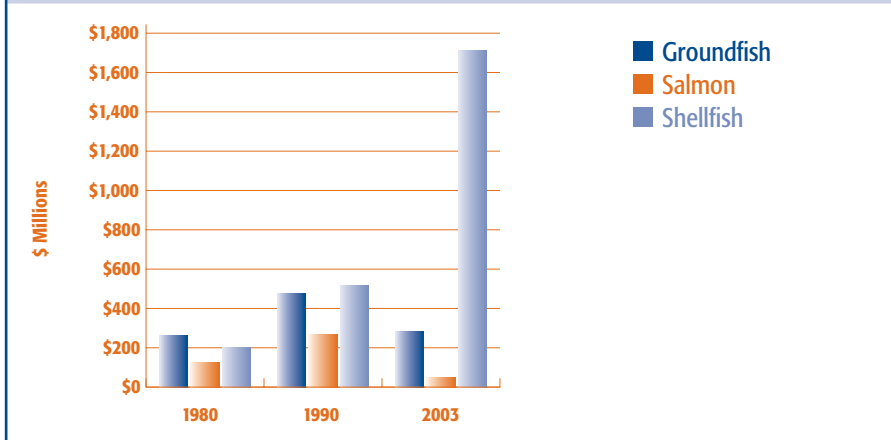
The current structure of the fishery on the Atlantic coast is built on an implicit social contract that was put in place after the establishment to Canada's 200-mile Exclusive Economic Zone in 1977. The dominant sector of the industry at the time was groundfish, particularly cod, and through a new system of enterprise allocations the offshore sector was given the lion's share of these stocks. The goal was to establish a vertically integrated industrial fishery with offshore vessels and large plants to compete in world markets with other major fishing nations.

The trade-off, whether intentional or not, was that independent owner-operator fleets and the many coastal communities that depended on them, were allocated a minority share of total groundfish stocks and almost exclusive control of fisheries for lobster, scallop, crab and a few other species. The Owner-Operator and Fleet Separation Policies were put in place to ensure that these fisheries remained in the control of small community-based enterprises. Unemployment Insurance provided a stabilizer for a highly seasonal industry on both the harvesting and processing sides.

On the West Coast salmon has long been the dominant fishery, producing high volumes of landings in relatively short seasonal runs. A large fleet of owner-operator enterprises was active in the industry with licences that provided access to the high value salmon harvests and to other groundfish, pelagic and shellfish fisheries on all parts of the coast.

As the following graph shows, the structure of Canadian fisheries shifted dramatically in the 1990s with the collapse of groundfish stocks on the East Coast and a dramatic decline in the landed value of West Coast wild salmon in the face of stock instabilities and competition from aquaculture products. The dominant market trend in Canadian fisheries overall was the growth in value of shellfish products.

Graph 5: Landed Values for Groundfish, Wild Salmon and Shellfish in Canada,<sup>37</sup> 1980, 1990 & 2003



In 2003 Canadian shellfish landings totalled \$1.7 billion in value, and represented 79% of total landed value, compared to 36% in 1990. Owner-operator fleets produce upwards of 75% of landed value for shellfish. As had been the case for Pacific salmon, the wealth of these fisheries flowed largely to small business operators in widely dispersed coastal communities. By the late 1990s these fisheries represented the dominant component of the fishery economy and the employment base for a large rural labour force.

Without Owner-Operator and Fleet Separation Policies in the Pacific Region, the focus of restructuring efforts there has been rationalization of the salmon fleet. In addition to substantial buyout programs, the key management mechanisms have been area licensing, licence stacking and leasing. Individual transferable quota (ITQ) regimes were introduced in other fisheries, notably halibut and sablefish, to facilitate fleet consolidation. There appears to be a continuing push from both DFO and the provincial government for restructuring the salmon fishery, in part to facilitate ongoing treaty negotiations with First Nations that at some point will involve large transfers of fishing rights and quotas.<sup>38</sup>

### 3.2.2. The Market for Access Rights

On the East Coast the Owner-Operator and Fleet Separation Policies meant that community-based, small enterprises held almost exclusive control of access rights for increasingly valuable shellfish fisheries.

Strictly speaking, fishing licences are privileges granted by the Federal Minister of Fisheries on an annual basis. In practice, however, they have become property rights that under normal conditions are subject to automatic renewal and can be transferred within a family or sold to the highest qualified bidder.<sup>39</sup>

Limited entry licensing was introduced in the 1970s as a conservation measure and as a way to “professionalize” the industry by reducing the numbers of part-time or occasional harvesters. The result is that in most commercial fisheries the number of licences is fixed. Therefore when fish products are in greater demand, the market value of the access rights grows as well. Under current tax policy, even if a licence holder transfers the licence to a family member or crewmember as a gift, a capital gains tax must be levied on the basis of the assessed market value of the asset relative to the original purchase cost.<sup>40</sup>

The great majority of current enterprise heads became owner-operators before the surge in value for fish products and therefore before the

<sup>37</sup> Source: DFO Statistics Branch.

<sup>38</sup> See *Treaties and Transition: Towards a Sustainable Fishery on Canada's Pacific Coast*, op cit.

<sup>39</sup> I.e. DFO will normally transfer the licence to the person designated by the licence holder as long as that person meets whatever criteria are in place to own and fish the licence.

<sup>40</sup> Contacts with officials at Canada Revenue Agency (CRA) indicate that this policy is currently under review to address the issue that a fishing licence is not property and cannot be legally transferred. Under this logic licence transfers that occur within a family without payment might not be subject to tax on the assessed market value.

licences themselves took on substantial market value. The survey results in this study reveal that on average fishing captains paid well under \$100,000 for their entire enterprises (licences, vessels and gear) when they first acquired them. Today they report average market values for their enterprises in excess of \$600,000.

A major focus of this study has been to determine the impact of rising licence prices on the current and future labour force in owner-operator fisheries. The findings point to a growing tension between two types of markets for fishing licences:

#### **The Traditional Owner-Operator Market**

In this market environment, the purchase price for a fishing enterprise is a direct reflection of its business value in terms of its capacity to generate revenues, taking account of the risks associated with shifting fish stock abundance and market demand. A harvester with adequate fishing and management skills who purchases the enterprise in this market, using conventional borrowing methods at reasonable interest rates and operating within all the rules, should be able to maintain a viable business (i.e. carry the operating and debt costs and make some level of profit).

#### **The Emerging Open Market for Access Rights**

This wider market environment is characterized by the participation of “special interest purchasers” whose investment capabilities and behaviour are not limited by the immediate revenue generating capabilities of the fishing enterprise being purchased. For a variety of reasons some buyers may have access to cheaper capital or other advantages, or they may be able to rationalize the enterprise by stacking the licence on an existing operation. They may be prepared to purchase the licence at a loss for tax purposes or to gain some competitive advantage. It is also possible that they participate in underground economy activities. On another level, government is often a major purchaser of licences for various purposes, and its market behaviour is not strictly limited by the business case.

The research findings indicate that, to the extent that it is possible to isolate them geographically or analytically, selling prices for access rights have been rising significantly in both these market environments. However, the reasons for this trend and the implications for the industry, vary considerably between the two market situations.

From the point of view of renewal of the fish harvester labour force, particularly at the level of enterprise heads, the principal challenges associated with rising licence values in the traditional owner-operator market are the need to improve access to capital, to build knowledge and skills to manage more valuable businesses, and to innovate in fleet or community-based fisheries management.

The emerging open market, however, raises more complex issues about the relative impacts of different fisheries management models and licensing systems, and ways to regulate markets for privileges to harvest public resources.

The major finding of this study with regard to current markets for fisheries access rights is that the open market is expanding rapidly to the point where it threatens to destabilize and indeed to displace the traditional market.

This trend manifests itself in different ways in different fleets and regions. In the Pacific, there are fewer restrictions on licence concentration while in the Atlantic, there are restrictions that are not effectively enforced. In the latter case, there is evidence that “special interest purchasers” often gain their advantage by circumventing policy regarding licence stacking and vertical integration of processing and harvesting operations. This drives up licence values and creates an uneven playing field for legitimate new entrants whom the policies were designed to protect.

#### **3.2.3. The ITQ Debate**

At the outset of the study a focus of concern was fisheries managed under individual transferable quotas (ITQs), particularly in the Pacific Region. The concern was that the market for transferable quotas would inherently favour the most affluent purchasers and lead

inexorably to concentration of ownership of access rights even where there are limits on concentration. To the extent that non-harvester interests are allowed to trade in quota this trend might be strengthened.<sup>41</sup>

After review of the findings, however, it is clear that the issue of price inflation for fisheries access rights goes beyond the ITQ issue. The same trends are being observed in competitive, effort-managed fisheries, most notably lobster on the East Coast and salmon in the Pacific Region. There is considerable evidence that prices for licences and quota continue to rise even in fisheries where landings and/or prices are depressed. Key examples identified in the research were:

- Price increases for crab quota in Newfoundland & Labrador appear to be driven by intensifying competition among processors for control of raw material supplies;
- Price expectations for lobster licences in Southeast Gulf New Brunswick remain high despite falling landings, in part because of anticipated purchases for transfer to First Nations through the Marshall Program;
- Prices for salmon licences in the Pacific Region are influenced by expectations of a shift to ITQ management; and
- Stacking and leasing practices in the Pacific Region have created a population of “slipper skippers” who simply lease out access rights without the expense of running vessels and hiring crew. Such individuals may therefore be in a position to pay higher prices for licences and quota.

In summary, the emerging open market for fisheries access rights is a relatively new phenomenon that has not been fully analyzed in terms of its implications for the fisheries economy and labour force. While ITQ systems may accelerate the development of such markets, they are not the sole or even perhaps the primary cause of increasing licence and quota prices.

The key drivers are the fact that many fish species have grown significantly in value, and the expanding open market involving “special interest purchasers”. Again these trends play out differently on the Pacific coast where consolidation of ownership is facilitated by fisheries management policies, and in the Atlantic where ineffective enforcement of existing policies is a critical factor.

### **3.2.4. Conservation and Orderly Management**

The study encountered serious concerns among key informants and focus group participants that higher market prices for fishing privileges, and the resulting shift of control over those assets away from owner-operators, have negative implications for orderly fisheries management and conservation. The key points raised by harvester leaders, government officials and independent experts were:

1. One of the strongest arguments mounted in favour of owner-operator fisheries, and in particular in defence of property rights (or ITQ) management, is that people who have long-term ownership of fishing rights will experience the strongest incentives for stewardship of renewable resources and vulnerable habitat. Concentration of ownership of fishing licences and quotas means that more and more vessels on both coasts are being operated by salaried captains and crew, “figurehead” captains, or owner-operators who are leasing licences and quotas at relatively high costs. These trends potentially undermine the link between stewardship and ownership.
2. New entrant captains who borrow money to buy enterprises at current price levels often find themselves in very difficult financial circumstances. To hold onto their businesses, and realize the value of such substantial investments, they may be tempted to cut corners on conservation through over-trapping, high-grading, misreporting of catches and other negative behaviours. This is seen as a growing trend in certain high value fisheries.
3. There is credible key informant evidence that financial pressures on young captains in some regions are contributing to the emergence of thriving underground markets for lobster, crab and other high value species. These practices again undermine orderly management and draw vessel operators into extra-legal behaviour. They also reduce tax revenues to government.

<sup>41</sup> An interesting example of this trend is the Bay of Fundy herring seiner fleet. Their ITQ system was set up in the 1980s with maximum limits on shares for some 40 vessels (i.e. no one enterprise could own more than 4% of the total fleet quota). Now after 20 years a few companies control the entire quota and the owner-operator provisions have been dropped entirely. [This information came from an interview with a herring seiner owner in May 2004.]

The study did not generate quantitative information on these trends or their consequences. However, they were seen to be very significant issues by many of the key informants, and on that basis we feel they are worthy of policy consideration and further research attention.

### **3.2.5. The Processor Perspective**

Contacts with processor representatives on both coasts have contributed to a broader understanding of the issue of control over fisheries access rights. The smaller, independent processors see themselves as key contributors to employment and economic stability in coastal communities. They are concerned about business viability in the face of current industry trends.

It is clear that there is a sharp conflict of interest between processors and harvesters in many Canadian fisheries. Processors are experiencing intense competitive pressures due to shortages of raw material supplies in groundfish and other key species, and to the emergence of China as a dominant global player in seafood processing and marketing.<sup>42</sup> Some see vertical integration as key to being able to survive in this environment. Their goals are to reduce raw material costs and to have more secure access to resource supplies.

In most fisheries in Atlantic Canada, enterprise owners are free to sell to the highest bidder. This has resulted in income levels that support large numbers of small businesses in hundreds of coastal communities. In short, current raw material cost levels and market mechanisms sustain the fish harvester labour force but are seen by some processors as a major constraint on business viability.

In this context the long-established relationship whereby processors lend money to harvesters to build their enterprises in return for obligations to sell fish to the lenders is considered to be normal and appropriate by all the key informants who discussed it. However, escalating licence and quota prices in recent years have increased risk levels, and processors are less willing or able to lend much higher amounts without having the licences itself as collateral. In this context, trust agreements have been used to provide protection for the lenders, but the result, in some cases unintended, has been permanent control by processors and the undermining of the Fleet Separation Policy.

It is interesting to note that representatives for independent processors in the Scotia-Fundy Region insisted that they could not afford to pay the current market prices for lobster licences even if they were allowed to buy them. Their view is that only companies that are already vertically integrated can manage such price levels. They called for a strict enforcement of fleet separation, including not allowing harvesters to own and operate processing facilities, as the best way to level the playing field.

The findings of this study, including international comparisons, suggest that the tensions between the harvesting and processing sides of the overall fishing industry are deeply entrenched and persistent, and will likely grow in intensity as demand for seafood products strengthens and resource supplies remain stable or perhaps shrink. The pressure from the processing sector for vertical integration will mount, as perhaps will the willingness to achieve that same result through surreptitious or informal means.

This report did not study the processing industry in any depth and is not in a position to generate policy advice on these issues. However, there clearly is a need for dialogue, and for creative solutions, in the area of harvester-processor relationships, particularly at the community level.

## **3.3. SUSTAINABILITY OF THE LABOUR FORCE**

### **3.3.1. An Emerging Crisis**

The bulk of the evidence generated by this study supports the conclusion that the industry is entering a period of great change, if not crisis, in terms of the sustainability of the labour force. There are four major drivers behind these trends: demographics, the changing status of crewmembers, reduced fishing opportunities, and rising licence costs.

- The fishery labour force is aging and a significant proportion of enterprise heads will retire from the fishery in the foreseeable future. Recruitment has been restricted over the past 15 years, and there are fewer people coming through the

<sup>42</sup> See conference report, *First National Human Resources Conference for the Seafood Processing Industry*, National Seafood Sector Council, November 2002. ([http://www.nssc.ca/files/Final\\_Report\\_Hr\\_Conference.pdf](http://www.nssc.ca/files/Final_Report_Hr_Conference.pdf)). See also *The Nova Scotia Salt Fish Industry: Situation and Prospects, 2004*, report for the Nova Scotia Fish Packers Association and the Southwest Shore Development Authority, by Gardner Pinfold Consulting Economists, March 2005.

industry to take the place of retiring captains. The fishing crew labour force is also older than the Canadian labour force in general with reduced numbers of new recruits.

- The evidence suggests that the economic trends in many parts of the industry have impacted crewmembers most negatively. Incomes have stagnated for the crew labour force overall, in part because of shorter working seasons. The industry is generally acknowledged to require hard physical work with comparatively high injury and fatality rates, although safety standards are improving. Despite much talk of “professionalization”, employment in the fishing industry has meant increasing social and economic marginalization for crew workers in many fleets and regions.
- Reduced fishing opportunities have an added negative implication: in an industry where the labour force has traditionally been recruited at the family and community level, and where most of the training takes place on the job, the reduction in fishing time not only limits employment opportunities but it also makes it more difficult to attract and train new entrants. In many fleets, young people no longer have opportunities to “grow up in the fishery” as was the case for most of the current labour force.
- New entrants wishing to pursue fulfilling careers face financial barriers that simply did not exist for the great majority of currently established enterprise heads. The expanding demand for licences and quotas on both coasts, driven to some degree by non-harvester interests, has effectively pushed prices out of the range of many working fish harvesters.

The research provides substantial evidence of the essential role played by community and family in the ongoing renewal of the fisheries labour force. The majority of new entrants to fishing work get jobs in family or community businesses, and the majority of those who became enterprise heads do so by taking over a family owned or community-based enterprise.

To the extent that the fishery labour force shrinks, or market pressures disrupt the traditional patterns of inter-generational transfers of fishing equity, this system of labour force recruitment and professional preparation will break down. As families lose control of fishing assets, they will tend to become more concentrated in the larger centres, taking jobs and future economic benefits away from coastal communities.

The emerging crisis in the fishery labour force is both a contributor to, and a result of, wider socio-economic and demographic trends in coastal-rural regions. The loss of fishing employment and incomes contributes to local decline, but rural communities in general face growing difficulties holding onto young people who are staying in school longer and opting for better paying, year-round jobs in urban areas. The aging labour force everywhere means greatly increasing demand for skilled trades workers in many sectors. Young people have attractive careers options to choose from and will not stay in fishing if the industry is not on a par with other occupations in terms of incomes and secure futures. Employers in both fish processing and harvesting are now reporting difficulties finding and retaining workers, a problem that few had to face in the past.

### **3.3.2. Unique Challenges in the Pacific Region**

One overarching finding of this study is that the fisheries labour force in the Pacific Region faces challenges of a different order of magnitude entirely than is the case for most regions and fleets on the Atlantic coast. Many of the stakeholders who participated in the study in the Pacific Region shared the view that adjustment programs and changes in fisheries management systems since the mid-1990s, combined with ongoing instabilities in stocks and markets, have severely damaged the viability of the community-based, owner-operator fleet. The evidence from the 2001 Census and from the surveys of fish harvesters lends substantial credence to this view.

Among stakeholders who support owner-operator fisheries, the focus of criticism is DFO policy allowing licence stacking and leasing and the intensifying pressure to introduce ITQs to the salmon fleet. Such policies are seen to be particularly damaging in terms of upward pressure on licence and quota prices, and incentives for professional harvesters to become “slipper skippers”. A major concern – expressed very strongly by leaders from First Nations commercial fleets – is the extent to which ownership of licences and quota is concentrating in the urban

areas of the Lower Mainland, leaving the more remote coastal communities without control of, or access to, adjacent resources.<sup>43</sup>

Fisheries employment is shrinking rapidly in remote coastal regions, and this is seen to contribute significantly to the patterns of social and economic breakdown, particularly for youth, in First Nations communities. Native leaders point to a future in which their communities will regain access to fish resources through treaty processes but will not have the skilled and experienced labour force to regenerate employment and community-based ownership.

The other striking aspect of the current situation in the Pacific Region is the lack of partnership and cooperation both among industry groups and between many industry groups and DFO. There are issues and conflicts in all DFO regions, but the situation in British Columbia is again unique in terms of the lack of effective mechanisms for dialogue and consensus building for policy development and fisheries management. There has been substantial consultation associated with Pearse-McRae and the restructuring of salmon management, but still a demonstrable lack of trust and mutual understanding. Some of the major harvester groups are convinced that DFO has an agenda it is determined to push through regardless of industry views and interests. DFO managers who were interviewed expressed the view that they simply cannot work with some of the established harvester organisations and that new structures for consultation and co-management are needed.

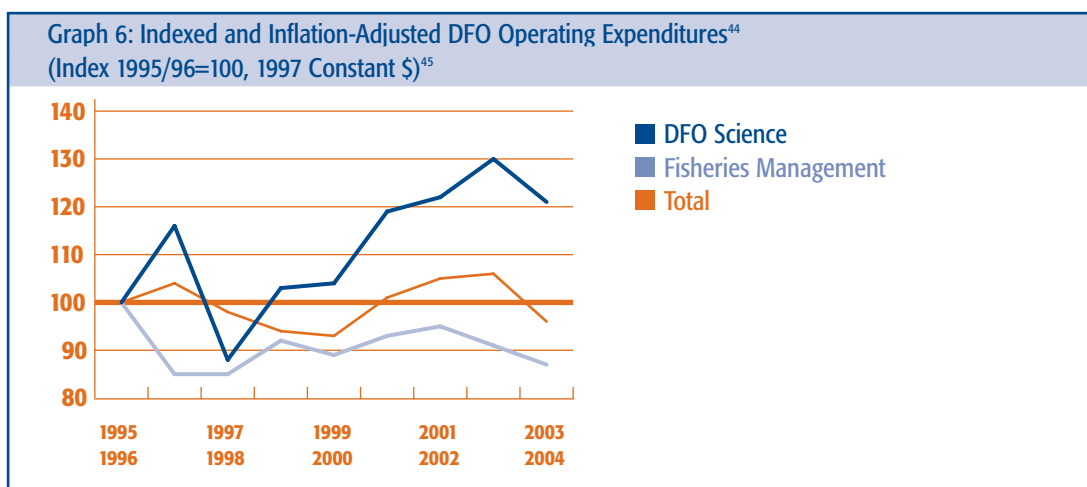
In summary, the study has found that the current condition of the fishery in British Columbia is unique and compelling. The re-stabilization of this fishery will require a dramatic shift in policy priorities and concerted action to re-establish and promote the position of owner-operators in the industry. It seems evident that a continuation of current fisheries management policies and practices, and of the polarization between DFO and industry, will result in far-reaching negative impacts for coastal regions in the province.

### 3.4. THE NEW FISHERY

#### 3.4.1. Transfer of Management Roles & Responsibilities

The literature review and interviews with DFO officials, independent experts and harvester leaders provide insight into current trends with regard to the evolution of fisheries management systems.

A period of restructuring began in DFO in the mid-90s stemming from the Federal Government's Program Review process and fish stock crises on both coasts. The following graph illustrates the impacts of restructuring on DFO operational expenditures in the areas fisheries science, fisheries management and overall departmental operations.



<sup>43</sup> These trends are well documented in a report entitled *Catch-22: Conservation, Communities and the Privatization of BC Fisheries* by Ecotrust Canada, November 2004.

<sup>44</sup> Source: Public Accounts of Canada.

<sup>45</sup> Constant dollars derived using GDP deflator for government expenditures on goods and services.

This information indicates that DFO Science (including the Oceans sector) has seen an increase in constant dollar spending of some 20% since 1995/96. Fisheries management, however, has lost ground by some 10% while total operating expenditures remained flat over the period.

*Where appropriate, resource users will assume greater responsibilities for decision making through local fleet planning, coordination of different fleet sectors and fisheries, and preparation and implementation of fisheries management plans at the local, regional and cross-regional level. Over time, resource users will be encouraged to take on more responsibility for operational decision making and outcomes, as specific fisheries management functions are shared with, and perhaps eventually delegated to, resource users. These changes may require legislative change.*

*A Policy Framework for the Management of Fisheries on Canada's Atlantic Coast, DFO, 2004: p. 36.*

DFO restructuring and policy renewal have meant a series of initiatives to transfer fisheries management roles and responsibilities to industry through co-management arrangements and other mechanisms. Industry has also absorbed substantially increased costs for licensing fees, dockside monitoring, at-sea observers, and harbour maintenance and usage fees. Co-management agreements often include cost sharing on stock assessment and other science activities. There are recent indications that DFO will pursue new initiatives to expand industry involvement in self-management activities, including reopening consultations on substantial revisions to the Fisheries Act.

These policy and program trends have significant implications for the fish harvester labour force. Expanded participation in fisheries management and responsibility for sustainable harvesting implies knowledge and skills that may not have been part of the traditional repertoire for most harvesters. Self-management also implies expanded organizational capacities at the community and fleet levels.

Harvester organizations have not been passive recipients of these trends towards self-management. The interviews, focus groups and case studies carried out in this study reveal numerous instances where industry groups have led the way in building capacity to manage local fisheries and to address problems such as fleet over-capacity, improved science and the need for more effective stock conservation methods. Important examples include:

- The West Coast Vancouver Island Area Management Board is mandated under the Ocean's Act to give coastal communities a meaningful say in the policy decisions that affect their economic health in relation to fisheries and other marine resources. The Board brings together coastal communities, industry groups and First Nations to coordinate the management and protection of shared resources.
- The Maritime Fishermen's Union "Community of Interest" project is using capital from the its snow crab allocation to finance community driven projects to improve fleet viability in the face of declining lobster landings.
- The snow crab fleet restructuring plan for the <35' fleet developed by the FFAW-CAW in Newfoundland & Labrador will give retiring harvesters an option to sell their crab quotas back to the fleet to improve enterprise viability and to counter the trend for processors to gain more and more control of quota.
- Harvester groups in les Îles de la Madeleine have successfully worked together to protect and enhance their traditional fishing grounds for lobster and scallop through locally designed conservation and habitat improvement measures.
- Harvesters in Southwest Nova Scotia are currently working to establish an industry controlled lobster management board to regulate and protect their most valuable fishery and to expand harvester participation in fisheries management, science and conservation.

### **3.4.2. Health & Safety**

Another area of change in the industry is workplace health and safety. In part industry is responding to external pressures, most notably the imposition of mandatory training requirements by Transport Canada and indications that insurance companies and workers' compensation boards are preparing to increase premiums or withhold coverage unless there are higher safety standards.

But there have also been independent initiatives by harvester organizations to address the unacceptable levels of accidents and fatalities in the industry. Far-sighted industry leaders also see that improved safety and working conditions are increasingly important for attracting new entrants to the industry. Harvester organizations have worked with Transport Canada to design safety-training courses that are relevant to specific fleets, and are helping to deliver these courses locally and at manageable costs.

Health and safety is clearly an emerging priority for fish harvester education and training and for expanded participation in policy and regulatory systems. From the industry perspective, the objective is to develop programs that are relevant, useful and affordable.

### **3.4.3. Professional Self-Determination**

Interviews and consultations carried out during the project reveal important parallels between current developments in fisheries management, fisheries science, education and training, and health and safety. In all four areas there are established top-down relationships between, on the one hand, the decision-makers, regulators and "enforcers" in government and, on the other, harvesters and their organizations. But we also find situations where industry groups are taking the lead in creative efforts to achieve objectives that have been negotiated with government. A third pattern is where responsibilities have been transferred to industry groups who have in turn contracted with outside service providers to implement the programs. The anecdotal evidence suggests that these service providers are often former employees of DFO or other government departments.

The following table describes these different approaches as distinct models for government-private sector interaction.

Activity Area	Traditional "Top-down" Model	Contracted Service Model	Professional Self-Determination Model
• Setting standards and goals	Government managers/scientists set standards and goals	Government managers/scientists set standards and goals in consultation with experts on contract with industry organizations	Government managers/scientists negotiate or facilitate consensus-building on standards and goals with stakeholder representatives <sup>46</sup>
• Designing action plans to achieve standards and goals	Government managers/scientists set out action plans after consultation with stakeholders	Government managers/scientists set out action plans after consultation with stakeholders and input from experts on contract with industry organizations	Industry groups consult internally and develop consensus among stakeholders on strategies and action plans to achieve standards and goals
• Accountability	Government managers/scientists monitor implementation and compliance and impose penalties for non-compliance	Experts/service agencies on contract with industry groups monitor implementation and compliance and report to industry clients and relevant government agencies	Industry groups track implementation and compliance, develop strategies to enhance compliance, and share information with relevant government agencies
• Evaluation	Government managers/scientists evaluate outcomes, make changes to policies and regulations, and prescribe follow-up measures	Government managers/scientists evaluate outcomes and consult with stakeholder representatives on changes to policies and regulations and follow-up measures	Government managers/scientists evaluate outcomes together with industry representatives, and negotiate or build consensus on changes to policies and regulations and follow-up measures
• Governance	Industry stakeholders may or may not be represented by formal organizations with accountability to members	Industry stakeholders have formal organizations able to manage revenues and contract for service provision from outside agencies/experts	Industry represented by formal organizations with capacity to manage shared resources, participate in contracts, and democratic accountability to membership
Key Examples	<ul style="list-style-type: none"> <li>• Integrated Fisheries Management Plans</li> <li>• Transport Canada regulatory changes</li> <li>• Setting TACs in commercial fisheries</li> </ul>	<ul style="list-style-type: none"> <li>• Some dockside monitoring programs</li> <li>• Data collection services for IQ fleets</li> <li>• Some safety training programs</li> </ul>	<ul style="list-style-type: none"> <li>• Fleet management boards</li> <li>• Some co-management agreements</li> <li>• Harvester professionalization boards</li> </ul>

<sup>46</sup> For fisheries management the Minister retains final authority in key areas such as licensing and allocations.

Industry groups are by no means resolved on the best approaches for fisheries management and science, health and safety or the development of professional standards and training. In an environment of entrenched mistrust, for example, efforts by government agencies to share decision-making are often met with resistance. When industry leaders get involved in trying to remediate an unpopular measure, they run the risk of being blamed for the problem through “guilt by association”. Many harvesters hold strongly to the view that it is government’s job to “make the rules and enforce them”, although they do want to be consulted on critical issues.

Despite the risks and the established habits, everywhere we looked during this study we encountered harvester groups who are pushing to take greater control of their situations. In areas such as reducing accidents at sea, designing relevant training programs, or managing fishing effort on vulnerable stocks, many industry leaders are saying “we are the ones to make this decision or to solve this problem because we know best what will work and we have the most at stake”.

As the evidence in this report confirms, the fishing industry has entered a period of rapid and widespread change for which there may well be no turning back. Industry leaders and their organizations face constant choices whether to resist change, accept it uncritically, or attempt to shape it by getting involved and trying new approaches and methods.

It is our conclusion that fish harvesters will increasingly need the knowledge and skill sets and organizational capacities associated with professional self-determination, and that these attributes will in future be as integral to the identity of fish harvesters as handling vessels and catching fish at sea.

### **3.5. RENEWAL OF PROFESSIONALIZATION**

Current approaches and models for fish harvester professionalization were initiated in the early to mid-1990s. Evidence generated by this study suggests that it may be useful to examine and evaluate these approaches in light of the experience to date and of recent trends and developments in fisheries.

#### **3.5.1. Progress to Date**

The most developed models for fish harvester professionalization have for some time been the Newfoundland & Labrador Professional Fish Harvesters Certification Board and the Bureau d’accréditation pour les pêcheurs et aides-pêcheurs (BAPAP) in Québec.

The Newfoundland program pioneered a number of important steps including the takeover of the fish harvester registration function and associated revenue stream, the integration of industry professional standards (including mandatory training) with DFO licensing criteria, and the use of prior learning assessment and recognition (PLAR) to facilitate certification of experienced harvesters.

Despite these achievements it seems unlikely at present that the mandatory training and certification systems now in place in Newfoundland & Labrador, and in Québec, will be adopted in other regions in the foreseeable future. In some regions – notably Pacific Region and the Gulf – divisions among industry groups and fleet sectors are not conducive to an integrated industry-wide approach. In these situations, the goal is currently to establish an umbrella registration agency as a source of core funding, and separate certification boards and training delivery systems.

In Prince Edward Island, the concept of professionalization is still mistrusted or misunderstood, and it will be some time before further steps are taken to consider establishment of a program. In Scotia-Fundy Region, the industry preference at the time of writing is to move forward slowly with a minimal voluntary training program without reference to professional certification.

In British Columbia, the BC Council of Professional Fish Harvesters has established a Certification Board made up of respected harvester leaders, and over 1,100 harvesters have been certified on a voluntary basis. The Council has developed a comprehensive training package to certify new entrants, but to date has not been able to deliver the training due to lack of government recognition and support.

This research has identified other constraints with regard to the mandatory professional certification approach in Québec and Newfoundland & Labrador. Two key factors are:

- Enforcement is a complex problem for the boards. DFO has been reluctant to enforce fish harvester registration once they turn over the function, and there are legal and other complications associated with linkage to licensing criteria; and
- Harvester participation in the required training in Newfoundland & Labrador has been constrained by issues of cost, limited local access and perhaps literacy barriers. There are concerns among harvester leaders about a possible backlash against professionalization if significant numbers of young harvesters are prevented from taking over the enterprises of their retiring parents or employers because they are not yet qualified to be “core” harvesters. (This may not be such an issue in Québec where the government provided substantial funding to support local delivery of training.)

There is no suggestion that the Québec and Newfoundland & Labrador professionalization programs are in jeopardy. The point simply is that there is continuing work to be done to develop the programs as conditions change in the industry and as more is learned about delivery of training and certification in particular regions and industry sectors. At the same time, it seems unlikely that professionalization programs in other regions will evolve towards comprehensive mandatory training regimes in the foreseeable future.

Given these factors, it may be a good time to review and update operating assumptions, models and objectives for fish harvester professionalization.

### 3.5.2. Government’s Stake in Professionalization

A further issue with regard to the continuing development of fish harvester professionalization is the lack of clear policy direction among federal and provincial governments.

*Fisheries and Oceans Canada supports professionalization because it represents a long-term approach to building the knowledge and skills required for health and safety, conservation and co-management by and among resource users. Professionalization also contributes to the self-reliance of fish harvesters and strengthens industry organizations.*

*A Policy Framework for the Management of Fisheries on Canada’s Atlantic Coast: p. 33.*

Human Resources and Skills Development Canada (HRSDC) continues to provide substantial resources through the Canadian Council of Professional Fish Harvesters to promote professionalization programs and to support the establishment of lead agencies in the regions. HRSDC and DFO worked closely with the provincial government in Newfoundland & Labrador to provide the financial, legislative and regulatory supports to establish a certification board. A similar pattern was followed in Québec, including DFO’s withdrawal from the fish harvester registration function to provide a source of sustaining revenues for the certification board.

In its policy framework document for the Atlantic Fisheries Policy Review,<sup>47</sup> DFO clearly sees professionalization as a means to achieve

improvements in health and safety, conservation and co-management in the industry. A more comprehensive policy document on professionalization has been in the works for some time, but has not been announced up to the time of writing.

The provincial governments in the Maritimes and British Columbia have taken a somewhat hands-off approach, requiring industry groups to reach consensus on professional standards and on the governance models for professionalization boards before making active commitments. Given the jurisdictional issues involved, DFO has indicated that it will not move forward without provincial government approval. Industry groups that support professionalization in these regions feel that the bar has been set too high, and, as a result, the long-standing divisions among industry organizations and mistrust on the part of some groups has resulted in a virtual stalemate.

In their public pronouncements DFO and the provinces are in favour of improved training and certification for fish harvesters, and professionalization is widely considered to be a good thing. In practice, however, there is a lack of policy support and of proactive efforts to move things forward in the face of pockets of resistance in the Maritimes and BC.

In particular, there is a compelling need for DFO to bring forward its policy document to spell out the conditions under which the Department will withdraw from the fish harvester registration function in regions still without professionalization regimes, and to define the regulatory mechanisms for integrating experience and training standards established by industry-led certification boards with the fisheries licensing system.

### **3.5.3. Emerging Education & Training Priorities**

At a very productive workshop held by the British Columbia Council of Professional Fish Harvesters in February 2005, a group of industry leaders reached consensus on the need for an expanded strategy for fish harvester education and training based on two elements: “work skills” and “survival skills”.

The workshop participants agreed that, while there have always been formal training and certification programs such as the Fishing Master IV, most harvesters have learned their trade through “informal apprenticeship”, i.e. learning on the job on family or community owned enterprises. With fewer boats on the water and much shorter seasons in today’s fisheries, there is less opportunity for young harvesters to learn their practical work skills on the job. The group saw a need therefore to develop new systems of formal training to make up for this lack of opportunity in the industry itself.

The participants further agreed that knowing how to run boats and catch fish is not enough to make a living in the fishery and in coastal communities today. Government is pushing more and more responsibilities onto industry to manage fisheries at the community or fleet levels, and harvesters need alternative sources of income to supplement short seasons. The group identified important new areas of knowledge and skill:

- Knowledge about fisheries management systems and policies;
- Specialized knowledge and skills to manage local fisheries and fleets through industry organizations;
- Knowledge and skills to participate in fisheries science and to oversee conservation, selective fishing and habitat renewal;
- Recognition and upgrading of trades skills that fishermen acquire on the job that make it possible for them to work on shore (e.g. carpentry, mechanics, electrician, hydraulics, etc.) and that help address shortage of skilled trades workers in rural communities;
- Improved communication skills to run effective industry organizations by communicating with industry groups and the public on fisheries issues; and
- Small business and enterprise management training.

All these areas of knowledge and skills were seen as essential “survival skills” in today’s fishery. It was agreed that future professionalization programs should develop new ways to deliver such education and training to harvesters. There will also be a need to incorporate essential skills training through such programs.<sup>48</sup>

The surveys of harvesters carried out during this study generated substantial evidence of harvester interest in two new areas of training: management of increasingly valuable small businesses and participation in stock assessment and other scientific research activities. Focus group discussions raised broader interests in capacity building for expanded self-management in areas such as conservation, stock and habitat enhancement, fleet management and health and safety.

The very positive news coming out of the surveys of enterprise heads and crew is that close to 40% of captains and over 60% of crewmembers expressed interest in taking some form of fisheries related training if it is accessible and affordable. This level of interest

<sup>48</sup> This overall perspective on training was endorsed at the CCPFH’s annual national conference for fish harvester certification boards and professionalization lead groups, held in Halifax in November 2004.

is all the more notable when we consider the relatively older age profile of the enterprise heads and the fact that upwards of a third of them will leave the industry over the next 5 to 10 years. There is sufficient interest in the industry to build on, given the right mix of programs and supports for participation.

#### **3.5.4. New Approaches to Professional Status**

Another aspect of the professionalization model that may need review is the concept of professional status for fish harvesters. Since the beginning of professionalization programs in the early 1990s, the focus has been to consolidate fishing opportunities and to recognize the primary status of bona fide harvesters who earn most of their livings from fishing and have made a career commitment to the industry. Much progress has been made on the part of both industry and DFO to ensure that services and fishing opportunities are concentrated on career professionals.

Recent trends in the fishery, however, throw new light on this issue. On both coasts, fishing seasons have become shorter in many fisheries because of limited fishing opportunities. Professional harvesters still may earn significant incomes in short fishing seasons, but may have more time through the year when they are not actively fishing.

An additional factor is that most harvesters have a variety of skills acquired in their work that overlap with other occupations: engine repair and maintenance, welding, carpentry, hydraulics, handling of perishable goods, use of navigation and communications technologies, and so on. Often these skills are not formally recognized because they are largely learned on the job. They could, however, provide a possible basis for employment in other industries during non-fishing parts of the year.

This approach may be of particular importance in many coastal-rural regions where there are growing shortages of skilled tradespersons due to out-migration and the aging workforce.

There are two challenges associated with this issue:

1. Current notions of fish harvester professionalization put priority on harvesters making a full annual income from fishing, and on excluding people who have other substantial career commitments. In some regions the concept of the professional or bona fide fish harvester may need to be adjusted to distinguish people who are committed career harvesters, but who pursue other skilled occupations during parts of the year.
2. For harvesters to participate more actively and openly in other trades, their crossover skills will need to be assessed and recognized, and perhaps upgraded to fill gaps in knowledge and experience. They may need formal credentials to work as tradespersons in construction, boat building, food processing, other marine occupations (tugboats, ferries, etc.), aquaculture sites, and so on.

It may prove useful to consider forms of “multi-skilling” that are not counter to the basic objectives of fish harvester professionalization. The first step should be to consult with industry stakeholders to assess the need and to establish the extent to which this approach is already in place in some sectors or regions. Subsequent steps might involve the elaboration of PLAR strategies to facilitate occupational diversity for harvesters within a professionalization framework.

## 3.6. THE POLICY ENVIRONMENT

### 3.6.1. The Commitment to Owner-Operator Fisheries

In light of all the factors described above, it is the conclusion of this study that the single most important policy challenge facing independent, community-based fisheries in Canada is the protection of the owner-operator basis of the industry.

It is clear from the findings that the economics of the fishery is changing rapidly due to a variety of factors stemming from the limited supply, and increasing value, of wild seafood products. In situations where the market for access rights is not managed or regulated in ways that are consistent with public policy goals for conservation, orderly fisheries management and socio-economic stability in coastal regions (on which the supply of skilled labour depends), we are already seeing major negative impacts on the fisheries management system, the labour force, and fisheries dependent coastal regions.

If not constrained and directed by clear public policy objectives, the evidence suggests that market forces will rapidly move the industry towards concentration of ownership and geographical location. In countries or regions where such processes are advanced, the consequences for fisheries dependent communities, and for the rural-based fisheries labour force, have been far-reaching and predominantly negative. This is evidenced most sharply by the contrast presented in this report between Canada's east and west coasts.

The research findings in Canada and in other fishing nations indicate that the sustainability of community-based, owner-operator fisheries requires a public policy commitment that is clear, comprehensive and effectively enforced. There are interesting policy models in the United States, Norway (i.e. fleet separation), France, the UK, Ireland and the European Union. The most explicit policy framework that was encountered, however, was the current policy framework in Atlantic Canada based on the Owner-Operator and Fleet Separation Policies.

An important lesson learned from the international comparisons, however, is that the effective development and "sheltering" of owner-operator fisheries may require a wide range of policy tools in the fisheries management field and beyond. These include:

- Fisheries management policies and regulations
  - Licensing policies and regulations (e.g. fleet separation and owner-operator restrictions)
  - Regulatory supports for fleet planning or management boards
  - Targeted quota allocations
  - Exclusive fishing zones
  - Vessel size regulations
  - Restrictions on ownership of fishing vessels
- Financial support and taxation policies and programs
  - Fisheries loan boards
  - Loan guarantees
  - Capital gains exemptions
  - Targeted tax credits
  - Community or industry investment funds
- Regional/rural development policies and programs
  - Financial supports for community economic development or diversification projects in coastal regions
  - Integrated coastal zone management strategies
  - Delineation of fisheries dependent regions as targets for regional or rural development supports

- Education, training and professionalization
  - Specialized education and training requirements
  - Linking of achievement of recognized professional status to fisheries licensing criteria
  - Training and capacity development of self-management in fisheries

In short, no one policy instrument within the fisheries management system – such as closing the loopholes allowing trust agreements in Atlantic fisheries – will ensure the sustainability of community-based, owner-operator fisheries. The situation calls for an integrated approach that reaches across government departments and federal-provincial jurisdictions.

### **3.6.2. The Policy Challenge**

Policy development and implementation for Canada's fisheries, the harvester labour force and fisheries dependent communities, now take place across many different departments, agencies and jurisdictions:

- The Minister of Fisheries and Oceans has authority over best use decisions, access and allocations and establishment of harvesting levels;
  - Within DFO regional managers have latitude to implement quite different policy directions and management models.
- The Federal Department of Human Resources and Skills Development Canada has a mandate to promote and support human resources planning and program development but does not deliver training or set occupational standards in most sectors;
  - HRSDC provides income stabilization to the fisheries sector through the Employment Insurance system (EI), and also provides financial support for education and training through EI.
- The Rural Secretariat, an agency within Agriculture and Agri-Food Canada, provides leadership on rural development policy in the Federal Government, and works to coordinate policy development with the provinces through the Rural Partnership.
- Provincial governments deliver training and set occupational standards for skilled trades and professions, and also operate fisheries loan boards.
- Regional and rural development is the responsibility of federal agencies such as the Atlantic Canada Opportunities Agency (ACOA), Western Diversification and Development Canada (WDDC) and the Federal Office for Regional Development in Québec (FORDQ), and of numerous provincial government departments and agencies.
- Safety related training requirements and health and safety regulations affecting fish harvesters are set by Transport Canada, the provincial departments of labour, and Workers' Compensation Boards.
- Critical financial and taxation issues such as capital gains taxes, fisheries loan board policies, tax credits, early retirement programs and rules for legal incorporation involve a number federal and provincial agencies.

There is at present no federal department or agency with a mandate to bring all these different interests together on a national level to establish a common policy vision and to coordinate policies and programs.

The Atlantic Fisheries Policy Review (AFPR) took up this challenge for East Coast fisheries and set out a vision centred on two broad objectives: conservation and sustainable use, and self-reliance; to be achieved through two principal mechanisms: shared stewardship and a stable and transparent access and allocation system. The AFPR framework refers as follows to the jurisdictional issues related to implementation of the policy vision:

*Pursuing the vision for the Atlantic fisheries will require a collaborative effort involving Fisheries and Oceans Canada, other federal departments, other governments, Aboriginal groups, resource users, coastal communities and others. Fisheries and Oceans Canada will play its part in focussing on conservation and sustainable use, by providing resource users with the flexibility they need to manage their own activities more effectively, by providing a more stable access and allocations approach, and by developing more inclusive decision-making process.*

*Other federal departments have a significant role to play in the economic and social development of Atlantic coastal communities.<sup>49</sup>*

This statement indicates that DFO's role is focussed on conservation, access and allocations, and hands-on management of fisheries. There is no identification of, or proposal for, a lead agency or a process to facilitate the participation of all the departments, agencies and non-governmental interests that would have to collaborate if the policy vision is to be realized. And of course the AFPR applies only to Atlantic fisheries.<sup>50</sup>

This study has generated substantial evidence that the development and implementation of a comprehensive human resources development strategy for the fish harvesting sector in Canada, and in each of its major fishing regions, will require the elaboration of a coherent and comprehensive policy vision that integrates sustainable harvesting of renewable marine resources with clear and achievable goals for enterprise viability and employment and community sustainability in coastal regions.

To achieve this objective the Government of Canada, in partnership with fishing provinces, will need to establish clear and coherent goals for the future of community-based, owner-operator fisheries and put in place specific policy and program instruments to achieve these goals.

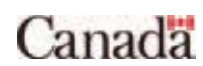
If the policy priority is narrow economic efficiency, fleet rationalization, and consolidation of coastal settlement patterns, this should be spelled out by the Federal Government in definite terms so that other government agencies and industry and community organizations can begin to address the human resources challenges involved in adjusting tens of thousands of people out of the industry and dealing with the impacts on fisheries dependent communities.

If, on the other hand, the goal is to optimize employment and income generation (within the constraints of resource availability) to stabilize and renew the labour force and provide a sustainable economic base for coastal regions, there are a number of important steps to be taken to stem the erosion of small business, owner-operator participation in the fishery and to support the renewal of the labour force with the requisite knowledge and skills.

Given the nature of the industry and the current allocation of legislated authority, the initiation of such a policy vision should be led by the Minister of Fisheries and Oceans. The first and most important decisions have to do with the goals for fisheries management beyond conservation and sustainability. An effective human resources development strategy can be developed and implemented by industry and its government and institutional partners on the basis of a clear integration of fisheries management policies and practices with human resources and regional development objectives.

<sup>49</sup> A Policy Framework for the Management of Fisheries on Canada's Atlantic Coast, op cit; p. 36.

<sup>50</sup> Work has been initiated within DFO-National Headquarters to develop a similar policy framework at the national level. The Pacific Region has a series of major policy initiatives focused on structure and management of the salmon fishery, the most recent being the Pearse-McRae report cited above. There is as yet no comprehensive policy initiative in the Pacific Region paralleling the AFPR.



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