

# PROFESSIONALIZATION, CERTIFICATION AND TRAINING OF FISHERMEN

**Meltzer Research and Consulting** 

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# Professionalization, Certification and Training of Fishermen

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by

# Meltzer Research & Consulting

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The views expressed in this paper are the responsibility of the author and do not necessarily reflect the views of the Task Force or the Government of Canada.

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# RÉSUMÉ

L'auteur résume les aspects clés de la professionnalisation, de l'accréditation et de la formation des pêcheurs. Dans la première partie, il définit la professionnalisation et décrit le cadre de réglementation d'autres groupes professionnels : dans de nombreuses professions, les règlements exigent l'obtention d'un permis, accordé par une organisation professionnelle. Les conditions d'accès comprennent un certain niveau de scolarité, un stage ou une période d'apprentissage et des examens normalisés. L'accréditation sert à reconnaître officiellement qu'une personne a rempli toutes les conditions requises. L'inscription, elle, dresse la liste des personnes accréditées, ayant les compétences requises pour pratiquer la profession. L'exposé se poursuit par une définition du pêcheur professionnel et par une étude des répercussions de la professionnalisation des pêcheurs de l'Atlantique.

La raison d'être de la professionnalisation des pêcheurs est étudiée dans le contexte du système d'inscription actuel qui est plutôt vaste. La pêche n'est pas une profession reconnue et presque n'importe qui peut se déclarer pêcheur. L'auteur décrit les avantages que présente la professionnalisation dans les provinces de l'Atlantique sur les plans suivants : normes d'accréditation reconnues, amélioration du niveau d'instruction, meilleure stabilité des revenus et de l'emploi, influence accrue des organisations de pêcheurs et, par conséquent, participation accrue au processus stratégique et au processus de gestion de la pêche.

Un survol des expériences à l'étranger, notamment en Islande, en Norvège, au Royaume-Uni et en Nouvelle-Zélande, permet d'illustrer les nombreux avantages de la professionnalisation. L'auteur passe ensuite en revue les éléments de la professionnalisation dans la région du Canada atlantique, se penche sur les possibilités d'action, y compris les principes et les restrictions, et décrit certains aspects d'une stratégie de mise en œuvre.

#### PROFESSIONALIZATION, CERTIFICATION & TRAINING OF FISHERMEN

# 1. INTRODUCTION<sup>1</sup>

This chapter discusses the concept and elements of professionalization in the harvesting sector of the fishing industry, reviewing the experience to date with professionalization of fishermen in Eastern Canada compared with those initiatives undertaken in New Zealand, Iceland, Norway and in the United Kingdom. The rationale for professionalization of fishermen is thereby presented within a global and domestic context. The concluding section outlines the basic principles and criteria for the introduction and implementation of a fishermen's professionalization program for the Atlantic fishery.

# 2. THE MEANING OF PROFESSIONALIZATION

# What is Professionalization?

What is professionalization? Who is the professional fisherman? These issues must be addressed in order to fully grasp the meaning of professionalization for fishermen in eastern Canada. This section outlines a working definition of professionalization and explains its significance to the future development of the Atlantic fishery.

While the medical profession is often regarded as the archetype of all professions, nurses, pharmacists, airline pilots, engineers, electricians, pipe-fitters, lawyers, dentists, dental hygienists, teachers, hairdressers and accountants (among others) are also considered professional occupations in our society. In other occupational groups (hockey players, artists, truck drivers, writers, construction workers) we draw a distinction between the full-time professionals and those who participate in a recreational, amateur or casual capacity. Similarly, professional fishermen are to be distinguished from recreational, subsistence or part-time fishermen.

When distinguishes these occupations from other occupational groups not seen as professional? Professional occupations are typically distinguished by their education, licensing and certification requirements, professional association, influence over income, and involvement in the management of their occupational sector or industry. Varying levels of regulation and control are used to establish the identity and criteria for membership in these professional groups.

# **Regulatory Systems for Occupational Groups**

Possession of appropriate certificates or licenses is required by law for many occupations. Licensing is only one means of controlling access and setting minimum standards for participation in the occupational group. In Canada, more than 64 occupations are governed by provincial or federal legislation. There are several approaches to regulating occupational groups. The three predominant forms of professional regulation are: licensing, certification and registration.

<sup>&</sup>lt;sup>1</sup> The author wishes to acknowledge that in preparing this chapter for the Task Force on Incomes and Adjustment in the Atlantic Fishery valuable input was provided by the Background Reports on Professionalization of Fishers undertaken by GTA Consultants.

#### Professional Licensing

Under a licensing system, the government grants the right or permission to carry on a trade, business or profession. Governments often delegate responsibility for overseeing licensing to professional organizations or other bodies. Those licensed have the exclusive jurisdiction to participate in the occupation and have the exclusive use of a specific title. Doctors, lawyers, dentists, and ship's masters are regulated by this method. Entrance requirements for these occupations typically requires formal education, internship/articling/apprenticeship, and standardized examinations. This system is considered the most restrictive and usually affords the occupational group's members a high level of control to determine the conditions for access and the standards required to participate in the profession. In some cases the profession's governing body has the legal mandate to set examinations, test candidates, issue and revoke licenses and take other disciplinary measures where necessary.

#### Certification

Certification is the granting of formal recognition that an individual has met a specific set of standards. It is a system which officially recognizes an individual as qualified by experience, education and/or specialized training to undertake certain kinds of work at a specified level of competence. This is the regulatory model used by psychologists, dietitians, electricians, plumbers, pipe-fitters and stationary engineers among others.

For many skilled trades or occupations, individuals seeking certification must pass an examination set by a recognized body. Graduated levels of certificates may be available according to the requirements of competency established for each level. Apprenticeship is one form of certification. Apprentice, journeyman or master "papers" may be required by law or by agreement between the employer and the trade organization in different occupations.

Like the professional licensing model, the certifying organization is required to maintain a register of its members. Under this system, the organization is usually required to register anyone who meets the specified educational qualifications, and may only de-register a member who is guilty of misconduct, gross negligence, corruption, or found to be incompetent.

#### Registration

Registration consists of the requirement that all persons or firms engaged in a certain occupation or business list their names and addresses with a government agency. This system simply records the individuals having the specified qualifications to do a particular job or occupation and as such are "registered members" of their trade or occupation. The maintenance of a public register of those entitled to the registered title is a minimal form of control, typically used to enforce such requirements as minimum age.

# Defining Professionalization: The Atlantic Fisheries Adjustment Program

The need to define the concept of professionalization within the context of the Atlantic fishery is well recognized. Under the aegis of the Atlantic Fisheries Adjustment Program, the DFO has been conducting research and consultations with fishermen's groups on certification and professionalization since early 1991. A working definition for professionalization was adopted by DFO in April, 1991 with the approval of the major eastern Canadian fishermen's organizations. These organizations mandated the DFO at that time to further develop the professionalization concept for fishermen.

The agreed definition for "professional" is consistent with the above discussion of professional regulatory models. This is not surprising given that certain elements are common to the majority of professional groups.

- Most professions have an organization charged with promoting members' interests, liaising with government and/or the marketplace, undertaking marketing and promotion, developing educational programs for new entrants as well as continuing education programs for those who wish to upgrade their skills and knowledge base.
- The members of a professional organization typically have input to the establishment of certification standards and entrance requirements.
- Most professionals can influence the prices they receive for their products or services. Many groups have their own income security programs such as pension or life insurance plans.
- Most professionals are formally involved in the policy formulation, administration, management and regulatory process that governs their industry or occupational sector.
- Finally, as members of a professional affiliation with recognized skills, expertise, standards, and responsibilities, the occupational group enjoys societal respect.

#### Defining a Professional Fisherman

What is a "professional" fisherman? Broadly speaking, a professional fisherman is one who is experienced, highly skilled and well-trained in the fishing sector, is a vessel owner/operator or is a steady crew member, fishes for the full fishing season, and depends on fishing for his livelihood and future. The professional fisherman is involved in the management of the fishery through fishing organizations and is respected by the general public and his peers as an accredited member of a professional group. The professional certification system regulates training and participation, recognizing different levels of knowledge, experience and responsibility.

# Implications of Professionalizing the Atlantic Fishery

In general, the certification model is considered the most appropriate regulatory system for the fishing industry. The licensing model used by doctors and lawyers is too restrictive for the fishing industry. The registration system, on the other hand, does not provide adequate control. What are the implications of adopting the certification system of professionalization in the Atlantic fishery?

Professionalization of fishermen implies that all those granted access to the resource base would be full time fishermen having no other significant sources of earned income. These individuals would be recognized as belonging to an occupational group with specific entrance criteria and standards of competence. A system of accreditation would acknowledge and reflect the different levels of skill and expertise required to undertake the multitude of tasks involved in fishing.

Fishermen in eastern Canada would contribute to the management of their industry. They would be recognized as (and would see themselves as) stakeholders with a substantial, long-term interest in stock conservation and sustainable fishing practices. Professional fishermen's organizations would play a significant role in the management of the fishery and in the sustainable development of the fishery.

Management policies would be realigned to favour the full-time operator of a fishing vessel by providing priority access to fishing licenses, vessel registration and other regulatory privileges. Government would structure support programs such as boat loans, capital grants and subsidies, fishermen's unemployment insurance and any new income stabilization plan to those designated as *bona fide*, professional fishermen.

Accordingly, professionalization would introduce a system of regulating participation in the fishery including certification, training and organizational structure. Professionalization would not necessarily exclude casual, part-time, subsistence, non-certified or recreational fishermen from participation in the Atlantic fishery. As in other occupations, a distinction would be made between those who are professional fishermen and those who are not. Priority access to the resource, services and benefits would be reserved for the certified fisherman.

#### 3. RATIONALE FOR PROFESSIONALIZATION OF FISHERMEN IN EASTERN CANADA

Having defined professionalization, what is the rationale for introducing an occupational regulatory system for fishermen in Eastern Canada? An examination of the existing system of occupational regulation and of global and domestic trends in the fishing industry reveals that professionalization has much to offer the Atlantic fishing industry.

#### Current System of Regulating Atlantic Fishermen

Those participating in the fishery in eastern Canada are loosely governed by registration-the least rigorous of the three regulatory models described above. Fishing is not a recognized profession; practically anyone can claim to be a fisherman

and anyone can assume responsibility for a vessel and crew without prior training or certification. The DFO maintains a list of fishermen and places no limits on the numbers or qualifications of those who register.

Each year all individuals (16 years and older) actively engaged in fishing must register with the DFO. Upon payment of the required nominal fee an individual becomes a "registered" fisherman eligible to work on any class of fishing vessel. At that time the fisherman is categorized and registered as either commercial, *bona fide*, or part-time (with the notable exception of the Southern Gulf (4T) area where a registration system for full-time or *bona fide* fishermen is in place).

It should be noted that it is the commercial registration and not the licensing system which is the dominant form of professional regulation in the Atlantic fishery. The fishing "license" is a limited privilege to harvest a particular species. Technically, the individual or company is registered, not licensed, as is the fishing vessel. Confusion is caused by the conventional, albeit erroneous, usage of the term "license" by fishermen who will refer to their Commercial Registration as their Commercial License and will say that someone has a full-time or part-time license.

# Qualifying as a Full-time Fisherman

To qualify as a full-time fisherman, a person must have fished on a commercial basis for a specified period of each of the previous two years. Full-time fishermen in the Maritimes and Québec cannot be employed during the local fishing season except in a self-employed capacity in another primary industry i.e. farming or logging. In Newfoundland a full-time fisherman can work up to 30 days outside the fishery during the specified fishing period. Essentially, anyone can become designated a fulltime fisherman after two years in most areas, provided they have participated in the fishing activities for most of the local fishing season and did not work full-time elsewhere. In all parts of eastern Canada, full-time fishermen may have other employment during the non-fishing season of each year. These individuals are all entitled to government compensation and other income support services.

#### Becoming an Owner/Operator

To acquire a vessel for the purpose of commercial fishing is not as straight forward as becoming a registered fisherman. The simplest and perhaps only avenue in some areas is to buy-out a retiring fisherman and thereby acquire a commercial fishing license. (The limited entry policy in many areas restricts the number of vessels in the fishery; however, a registered fisherman can enter through a buy-out purchase. While licenses are technically not transferable, in practice they go with the vessel and gear).

#### Existing Career Pathway

The existing system does not impose any regulatory controls for entry into the fishery. Nor is there a professional structure or recognized career path for fishermen. As noted there are no standards or training requirements. Theoretically, an ambitious sixteen year old could enter the fishery and over a two year period go

from being a complete novice to becoming the owner/operator of a large fishing vessel (up to 100 GRT) without ever taking a course or passing a competency test. The vessel's crew of three or four "registered" fishermen need not be competent mariners nor fishermen, indeed need never to have been on board a boat.

Department of Transport regulations do require skippers and deck officers on vessels over 50 GRT to have completed some of the components of the Fishing Masters Certificates. While no requirements exist for inshore vessels under 50 GRT, an increasing number of inshore fishermen are pursuing fisheries training and certification programs through the provincial fisheries schools and community extension programs.

The institutional base for vocational and post-secondary fishermen's training is well developed throughout the region. The provincial fisheries schools offer all or part of the Fishing Master Class I, II, III, and IV certificate programs. A fisherman holding a Fishing Master I ticket is qualified to skipper any sized vessel. The Class IV Certificate qualifies fishermen as first mates or skippers on vessels less than 100' operating within 120 miles from shore. To achieve these certificates the candidate is required to pass standardized written examinations and an oral exam given by a Coast Guard Examiner. In Canada, the stringent standards and training requirements that exist for commercial stream vessels do not apply to fishing vessels. In New Zealand and the U.K., the same certification requirements apply to fishing as well as other commercial vessels.

#### The Professionalization of the Global Fishing Industry

The global, modern fishery calls for a well-trained, formally educated, professional work-force like other sectors of our economy. With the advent of modern technology for navigation, fish finding and harvesting, the catching sector is now predominantly a sophisticated, capital intensive operation. Vessels and gear are expensive, equipment is high tech, the multi-disciplinary business of fishing is increasingly complex and the marine environment is ever-challenging and always hazardous. The global fishing industry is preoccupied with consumer demand for increasingly high quality product and the regulatory standards for food handling and quality control are becoming increasingly stringent.

Accordingly, throughout the industrialized world fishing is becoming *professionalized* and fishermen are increasingly recognized as *professionals* with specific skills, expertise, certification requirements and career pathways; the skipper of a larger vessel is regarded as the managing director of a floating workforce harvesting a highly prized capital resource. Fishing industry associations (eg. in the U.K., New Zealand) have professional staff mandated to promote the overall efficiency and profitability of the industry, identify future skill requirements and training needs, coordinate training programs and continuing education, develop standards, conduct market research and advise on industry trends and career development.

There exist many precedents and models for fishermen to draw on in an effort to establish a professional framework: the current registration system is inadequate, given the level of skill and expertise required to competently operate the fishing vessels and gear; deliver top quality fish to the processors; and manage a successful fishing enterprise in today's fishery. At the very least, a graduated certification system including shore-based training (eg. health and safety, fisheries science and management) and minimum standards of competence should be established for all participants from new entrants to those responsible for skippering the vessels.

# Impetus for Change

The East Coast fishing crisis has highlighted the inadequacies of the current system. Declining stocks, overcapitalization, and restraints on government spending for industry services as well as reduced government transfer payments, have prompted regarding rights of access to the resource, to licenses and to income support programs. Recognition that the resource is not unlimited has sparked renewed interest in addressing issues of access and distribution, in protecting the fishery for coastal communities, and in providing a more economical, stable fishery.

This Task Force is interested in professionalization as it concerns income support systems, access to the fishery and the capacity of the fishery. Professionalization, while not a panacea, addresses all these issues to some degree.

# The Benefits of Professionalizing the Atlantic Fishery

Professionalization in eastern Canada can be expected to result in benefits in six main areas: 1) recognized certification standards; 2) improved education levels of fishermen; 3) increased stability of income and employment; 4) stronger fishermen organizations; 5) greater involvement of fishermen in the management and policy process; and 6) the creation of a respected professional group.

# Certification Standards

The benefits of establishing a certification system to control standards of competence in the fishing industry are numerous. As members of a distinct profession, all participants would be formally accredited. Certification criteria would meet industry standards of competence, education, training, and harvesting activity. The general levels of skill and ability in the catching sector would be standardized, improving safety, productivity, and quality. Individuals would be attracted to and enter the industry as an occupation of choice, not of last resort. New entrants would be highly trained, productive recruits with structured career paths ahead of them. In general, a certified labour force would be more stable, highly qualified and dependable. The certification system would eventually result in a better balance between the number of participants and the forms and levels of harvesting activity that could be supported by the resource base.

# Training and Education

The sophistication and complexity of the fishing industry has increased rapidly over the past few years. As a result of recent changes in fishing technologies, regulatory and stock management systems, international market demands, and in resource economics, the modern fishery requires a well-trained, professional workforce. A wider range of skills (engineering, refrigeration, hydraulics, electronics, etc.) and a greater level of expertise are now required to safely and competently manage a successful fishing operation. Fishermen, like other professional occupations, require solid foundation training (shore-based and on-the-job) as well as continuous upgrading to remain competitive and competent in the global industry.

Fishing is among the most dangerous occupations in Canada in terms of injuries, fatalities and occupational health hazards. Lack of appropriate training not only places the vessel and the fish products at risk, but also jeopardizes the personal safety of the crew. Commercial fishing will always be a high risk occupation given the inherent hazards of the marine environment and the vicissitudes of the resource base. With training and education the health and safety record should improve.

With professionalization, fishing would be regarded as a distinct occupation with sub-specialties, each with its own technical, academic and career path requirements. Fishermen would acquire the foundation skills (beyond literacy and numeracy) needed to manage fishing enterprises in a rapidly changing industry. Professional fishermen would be equipped to participate in resource management decisions, quality improvement, marketing activities, and scientific research activities.

As certified, educated members of a multi-disciplinary occupation, professional fishermen would significantly increase their career opportunities both within and outside the fishing industry.

#### Incomes

A professional labour force would regard the fishery as a career from which an adequate, if not handsome, income could be derived. Incomes would be expected to increase as fishermen increased their control over the number of markets and the value of their products. Professional fishermen could choose to participate in collective bargaining with fish buyers as an appropriate means to regulate their incomes. With professionalization, marginally attached participants would not be certified and therefore would not be eligible for government services in the fishery. Finally, as members of a well-organized and defined professional group, commercial fishermen could participate in income security and group pension plans, life insurance and family health benefits.

#### Organization

Under the certification system, a profession must have the collective ability to pursue or defend its members' common interests, to regulate itself and to exercise control over membership. This implies the existence of some organizational infrastructure to facilitate collective decision-making and action. In the case of fishermen in eastern Canada, this would require that a much greater proportion of *bona fide* fishermen than is now the case would belong to, and actively participate in, independently funded fishermen's organizations.

Strong organizations would facilitate fishermen's collective participation in the regulation of the numbers of new entrants to the profession and in establishing entrance requirements. Fishermen would also collectively participate in the elaboration of training standards and in the design and delivery of specialized training programs.

#### Fisheries Management

Professionals conventionally play a significant role in the overall management and regulation of their particular industry or economic sector. Governments rarely formulate policy for these self-regulating occupational groups without prior consultation with their designated professional bodies. Accordingly, professionalization would alter the regulatory process as well as fishermen's role in managing their industry. This process would result in the shift of management and regulatory responsibilities to the industry or the introduction of a co-management system. In either case, the costs for many services (eg. enforcement) would partially or wholly assumed by the fishing industry.

Government would recognize professional fishermen's organizations in decision making and fishermen, through their professional association, would share the responsibility for the formulation and implementation of management measures. By increasing the effective involvement of the participants, the legitimacy of conservation and management policies would be reinforced. Compliance would be recognized to be in the best interest of the profession. Enforcement, discipline, conservation, quality control, marine environmental quality, etc. would become important industry matters. Fisheries science and data acquisition would be improved through the participation and contribution of the professional fishermen who, as stakeholders, have a primary interest in protecting the resource base and ensuring accurate statistics.

#### Professional Image

Commercial fishing would become recognized as a distinct profession. Like other professions, (eg. the merchant marine, the health professions) different occupational groups would exist, each with its own technical and educational requirements and career paths. Sub-specialties and a graduated system of certification would ensure an enforced set of standards and promote professionalism among participants. By creating and maintaining a professional workforce, the fishing industry would enhance its credibility as well as its ability to influence control over resource management decisions.

#### 4. EXPERIENCE OF FISHERMEN'S PROFESSIONALIZATION IN EASTERN CANADA

Fishermen's organizations and the DFO have endeavored to develop professionalization policies and programs since 1989 for fishermen in eastern Canada. DFO included professionalization and certification of fishermen in the Atlantic Fisheries Adjustment Program as part of its initiatives to restructure the industry. The DFO's professionalization and certification program is generally endorsed provided that it is a fishermen-controlled and coordinated process. In a time of declining resources and shrinking government support programs, the *bona fide*, full-time commercial fishermen seek recognition of their status as core participants in the industry. The need to rationalize limited resources, i.e. priority access to fish stocks, licenses and government services, is of particular concern in Newfoundland and to some extent Québec.

In general terms, the process of professionalization of fishermen in eastern Canada is underway. Fishermen are attracted to professionalization for a variety of reasons:

- improved status for fishermen as highly skilled and committed professionals;
- greater recognition of the contribution made by fishermen to the region and to society;
- need to control access to fish stocks, licenses and government services;
- greater involvement in the management of the fishing industry; and
- strengthened professional organizations to increase and stabilize incomes as well as to influence government policies.

#### Newfoundland

The Food, Fish and Allied Workers Union (FFAW) of Newfoundland has independently developed a comprehensive certification and training system for inshore fishermen following extensive consultations with the fishing communities. Under the proposed system, there would be four levels of accreditation: New Entrant, Level I License, Level II License, and Master Fisherman. *Bona fide* fishermen would be "grandfathered", but would be encouraged to upgrade their fishing and management skills. New entrants would be required to meet defined standards of competency before participating in the fishery. Training requirements for inshore fishermen would incorporate Department of Transport regulations for commercial stream vessels.

Following the 1992 moratorium on northern cod, the federal government introduced the Northern Cod Adjustment and Recovery Program (NCARP). The NCARP compensation package includes measures to reduce the work force (license retirement payments and early retirement) as well as training programs directed to fisheries or to other sectors. This has accelerated the restructuring process in Newfoundland and has further increased core participants' interest in professionalization.

# Québec

In Québec, a number of regional fishing associations formed a provincial umbrella organization, the Alliance des Pecheurs Professionels du Québec (APPQ). The APPQ conducted extensive consultations in fishing communities over a two year period. It

concluded that the professionalization of fishermen was key to the creation of a dynamic, economically viable fishery and proposed the implementation of a certification system. The proposed criteria to become a *bona fide* fisherman would include: level of fish landings; the level of income earned from fishing; ownership of a boat and fishing gear; and level of experience and training. The proposed system would identify professional fishermen. Non-certified participants would be excluded from government support programs.

#### Scotia-Fundy

In Scotia-Fundy there is less concern with the need to limit participation of parttimers and "moon-lighters". Rather, the need to strengthen professional fishermen's organizations, increase membership, increase members' role in fisheries management, and find independent sources of funding for organizational activities was seen as more important. Attitudes towards training and certification were generally positive, but these were not seen as high priorities for the industry.

#### 5. EXPERIENCE WITH PROFESSIONALIZATION ABROAD

The Task Force examined the professionalization experience in other industrialized fishing nations: particularly in Iceland, Norway, the U.K., and in New Zealand. This section provides an overview of each country's initiatives and the global trends in fishermen's professionalization.

#### Iceland

Fishermen are accorded a great deal of respect in Icelandic society. Fisheries products account for more than 80% of the country's total merchandise exports. To this small country, fishing is of fundamental importance. Maintaining their international reputation for exceptional quality and the need to constantly improve Iceland's competitiveness in the global market is critical to the continued success of the fishing industry and the country. A professional, self-sustaining workforce is a prerequisite to achieving both.

Iceland has a graduated system of formal training and certification for all fishing vessel operators. Certification is mandatory. Education and training for careers in the Icelandic fishing sector is offered at the primary school, secondary, post-secondary and university level. The certification system controls standards of competence, promotes career advancement and facilitates career changes within other sectors of the industry and in government. Further, the industry's efforts to implement Total Quality Management systems to meet the International Standards Organization ISO 9000 designation requires training and education at all levels for all participants in the catching and processing sectors.

In Iceland, there is a healthy balance between the numbers of fishermen, capacity and the ability of the resource base to provide full-time employment with adequate incomes. Fishermen actively influence resource management decisions and control their incomes through fishermen's organizations. Crews on all but the smallest vessels are unionized. The professionalization of fishermen, combined with the political process through which fisheries policies are created, has resulted in a high level of compliance and support for management measures in Iceland.

#### Norway

#### Need for Restructuring

Norway and Canada share similar conditions in the management of their fisheries. For many participants in both countries, though economic returns are often low, the fishery is a way of life. However, there have been important differences in their respective fisheries policies. Norwegian social and economic policies dating from the 1930s strengthened incomes and working conditions for fishermen. A heavily subsidized system of price supports and an elaborate income maintenance scheme sustained coastal communities and provided fishermen with adequate incomes, comparable to other occupations.

Norwegian fishermen traditionally controlled sales of raw fish through sales organizations. These organizations had the exclusive right to sell fresh fish and act as a centralized system of managing and monitoring landings. This system, together with the price support program, generally provided an adequate and stable (though artificial) income for fishermen. Norway has recently restricted the mandate of these sales organizations and has introduced an expanded open market system for raw fish.

Norway, like Canada, currently faces overcapacity in both the catching and processing sectors, rapidly changing international trade configurations and dependence on government income transfer programs. These macro-economic conditions have generated a major debate in Norway about the need to restructure the fishing industry. Most Norwegians are strongly committed to sustaining the remote, northern coastal communities dependent on the fishery; and fishing is seen as central to the national identity. Although fisheries management policies are currently being challenged, it is unlikely that any restructuring will be imposed which is not broadly acceptable to fishermen and their communities.

#### Registration

In Norway there is a national registry of professional fishermen. To qualify as a professional fisherman, there are detailed criteria regarding experience and income earned from fishing. These criteria are developed jointly by government and the Norwegian Fishermen's Association (NFA) and are subject to constant review and revision. Access to licenses, fish quotas, and government income supports is determined by this single registration procedure.

#### Fishermen's Organization

The NFA is the sole fishermen's organization. It is the recognized, legal representative of the catching sector and is independently funded by a levy on the sale of fish by its members. No significant policies or regulatory measures affecting the industry are considered by government without prior consultation and approval

of the NFA. This association has negotiated significant employment and income benefits for Norwegian fishermen.

# A Career in Fishing

A primary goal for fisheries policies in Norway is to make fishing an attractive occupation for both men and women. Norway has close to full employment and the Norwegian economy, particularly following the discovery of offshore petroleum, has enjoyed steady growth. In order to maintain its labour force and its rural population base, government found it necessary to provide reward structures allowing the fishing industry to attract labour and capital. This led to a broad range of economic and social measures/benefits for fishermen. Norwegian youth are encouraged to enter the industry and career planning is available.

While there are defined career paths in the fishing industry, for most people career choices are governed primarily by the community in which they live. Most people prefer not to leave their local community, so they tend to choose from the career paths that are available in the area. The subsidization policies of the Norwegian government has enabled individuals to remain in their coastal communities and fish for a livelihood.

# Training, Education and Certification

In Norway, training and education in every sector of the fishing industry is organized, actively promoted and coordinated by government and industry. Entry level and advanced training is encouraged and readily available through high schools, vocational schools, technical schools, community colleges and universities. Several coastal high schools offer foundation programs for the harvesting as well as the processing sector. At present there is no government policy requiring training and certification. There is reportedly grassroots resistance among the fishermen. The leaders in the Norwegian fishing industry, however, are committed to implementing a system of training and certification for fishermen. It is expected that a set of certification standards will be finalized by the end of 1993.

#### Total Quality Management

While there is no formal requirement to obtain the ISO 9000 designation in Norway to sell fresh or processed fish, the international trend is to produce higher quality products through the adoption of standards and total quality management. Some supermarkets in the EC can only import products from enterprises that have received this international designation or the equivalent. As yet, no Norwegian company has been awarded the ISO 9000 approval, but several are trying to achieve this standard of quality. The implications are significant for all sectors of the seafood industry. All participants must meet defined standards through certification and training, including fishermen.

# The United Kingdom

The U.K. system of certification is of particular relevance as it represents a model widely accepted by the catching sector and recently adopted by New Zealand.

# Introduction of a Comprehensive Certification and Training System

The U.K. is currently implementing a mandatory training and certification system for all its industries. Based on the "standards of competence" concept, the U.K. has established a comprehensive framework of National Vocational Qualifications (NVQs) and training in an effort to make its industries competitive in the Common European and global marketplace. All industries have designated Industry Lead Bodies (ILB) and Industry Training Organizations (ITO) to develop and implement the NVQs for all employees and employers.

The ILB is responsible for developing the workplace standards of competence and codes of practice for their industry. Standards of competence specify the necessary skills, knowledge, understanding and performance levels for every position. A graduated system of certification has been developed in accordance with the specific industry's NVQs. This system of certification measures on-the-job performance following formal training and education.

The NVQs for the catching sector were developed for several successive certification levels. A Level 2 certification for crew members was implemented in 1993. This program is comparable to the merchant marine equivalent. Accreditation indicates that the fisherman successfully meets the workplace competency standard set by industry.

# Benefits of the Occupational Standards Certification & Training System

Developing industry standards of competence for each position together with an individually tailored training program provides definite benefits including:

- Standards of competence provide an objective measure against which employers can evaluate prospective candidates. This facilitates the recruitment and selection of new entrants.
- The development of industry standards facilitates the identification of areas of weakness in the performance of the individual with respect to the practical requirements of the industry. Once hired, the employee can assess the performance of the employee against the defined standard. Training can then be targeted.
- The assessment of the effectiveness of training is made easier by the development of industry standards. Once training is targeted, its success can be assessed through the monitoring of improved performance.

- This approach allows flexibility in the delivery of training and places no limitations on access to qualifications. Training can be tailored to individual needs and to workplace requirements. Various approaches are possible, including computer based training, open learning modules, counseling and/or tutoring. In addition, this system can be delivered and assessed totally within the workplace.
- This approach also facilitates multi-skilling and team work by identifying the shared as well as distinct skills and workplace requirements within and among occupations. As competences for each position are well-defined, it is a simple procedure to identify the new skills or expertise required and to provide individuals with the specific training they need to assume other positions.
- This certification system is a versatile and effective management tool.

This approach offers definite benefits to fishermen as it:

- Provides recognition and respect for skills, expertise and experience;
- Provides a measurable standard to which they can aspire;
- Provides a motivating factor and context for fishermen to identify and pursue individual training needs;
- Provides various options within a structured, defined career path; and
- Facilitates transferability outside as well as within the fishing industry, i.e. enhances career mobility.

# The Seafish Industry Authority

The Seafish Industry Authority (SFIA) is the lead body and the ITO for all sectors of the fishing industry. The SFIA is a government and industry sponsored umbrella agency which coordinates all fishing activities in the U.K. (including training and research & development). It is a statutory body which is self-directed and funded by a levy on the industry. The SFIA is expected to respond to each sector of the industry. Each sector (with its individual organizations) is represented on the Board that oversees the operations as well as the advisory committees of the association.

SFIA established a training division in 1984 to examine the industry's training needs in light of the economic and structural challenges the EC Common Fisheries Policy would bring in the 1990s. The training division developed a training strategy to promote the overall efficiency and profitability of the entire industry. This strategy is designed to bring each sector of the fishing industry up to an international standard. Currently 10% of the SFIA's annual levy income is allocated to training activities with external sources supplementing the training budget. With the introduction of NVQs, training and education is of increasing importance and will receive a greater percentage of budgetary allocations.

# Group Training Associations

SFIA coordinates vocational training for the catching and processing sectors through a network of Group Training Associations (GTAs). The GTAs were created in 1985 throughout the U.K. to provide the catching sector with new entrant and volunteer safety training. There have been major advances in training in the catching sector in recent years, and this has resulted in a positive change of attitude.

Under the NVQ system, these local groups, in cooperation with the SFIA, are responsible for designing and delivering the off-the-job vocational training programs in response to the identified needs. Some open learning modules are offered through the GTAs for the catching sector. These modules are delivered in the workplace by visiting instructors. This initiative is very effective and well received by the fishing industry.

#### Formal Training and Education

There exists a well developed and extensive institutional base for training and education of fishermen in the U.K. Formal education and training programs offer defined career paths to those wishing to enter the fishing industry. These programs facilitate career shifts within the sector and are linked to higher education programs at universities. Distance education programs for adult industry participants are also offered. Colleges and universities work closely with industry to ensure that research is targeted to the needs of industry. These institutions have an important role under the new system and must adapt to respond to the needs of the industry and individual based learning.

SFIA is attempting to coordinate the delivery of fisheries education and training offered at recognized institutions. The fishing industry must now utilize existing institutional training if fishermen are to meet the vocational qualifications. Similarly, these institutions must provide the technical services and expertise required by the fishing industry. SFIA is seeking to establish Centres of Excellence to ensure the provision of expertise in all areas of fisheries education and training. The GTAs will be encouraged to direct prospective trainees to the most appropriate Centre to ensure viable class sizes.

#### Traditional Certification Standards

The Department of Transport in the U.K. is responsible for regulating the seagoingqualifications of fishermen. A Certificate of Competency is mandatory for vessel operators over 16.5 metres and will soon be extended to include inshore boats less than 12 metres. There are three different classes of certificates depending on the size of the vessel and the conditions. Present Department of Transport rules stipulate the minimum number of certified fishermen required on board various vessels. New entrants are required to take basic courses in safety and survival. Vessel licensing and other regulatory requirements for fishermen is the responsibility of the fishing ministries in the U.K.

#### Producer Organizations

The U.K. has implemented Producer Organizations (PO) in the fishery–an innovative system of co-management and market development. This system provides important benefits for fishermen: it optimizes the distribution of available quota within a defined region; it facilitates the distribution of resources to communities; it provides opportunities for fishermen to be involved in regulation and enforcement; it increases awareness and accountability among participants; and it involves fishermen in quality assurance processes.

#### Quality Assurance Initiative

The buyers of fresh and processed fish products in the U.K. are increasingly large supermarkets who have obtained the British Standards Quality trademark-BS-5750. Applicants must meet stringent standards to qualify for a BS-5750 Award. This designation (BS 5750) is broadly accepted to be roughly equivalent to the requirements for the ISO 9000 used in Iceland and Norway.

For a supermarket to maintain this award, all suppliers to the supermarkets must also meet these standards. The large fish suppliers have accordingly obtained the BS-5750. Many medium and small fish suppliers have not obtained the standard due to the expense and effort involved. As a result, they are excluded from competition for the growing supermarket share of the fish.

BS 5750, unlike the ISO 9000, is incomplete as a measure of quality in that it does not link the training of personnel to the NVQs. The philosophy of Total Quality Management (TQM) is that a quality workforce is needed to provide a quality product. The BS 5750 does not effectively measure the quality of the performance of the workforce. This measure will undoubtedly be introduced as consumers demand increasingly higher quality products.

#### New Zealand

#### Quota Management System

New Zealand implemented a Quota Management System (QMS) in 1986, a fisheries management method based on individual transferable quotas. Fishermen collectively assume significant management responsibilities as well as the costs of management and enforcement under the QMS. The New Zealand Fishing Industry Board (NZFIB), an umbrella organization similar to the Sea Fish Industry Authority in the U.K., plays an important role in all aspects of the fishing industry. This shift in responsibility to the industry, as well as the guaranteed rights to quota for fishermen, has contributed to the professionalization of fishermen in New Zealand.

# Introduction of a Comprehensive Certification and Training System

New Zealand adopted the U.K. model for standards based certification and training in 1992. The fishing industry welcomed this innovation and was ideally placed to implement the new system. The NZFIB assumed the lead role for the fishing industry under the new system and is the certified Industry Training Organization (ITO). Funding for the Board continues to be from a levy on all sales of fish.

The existing institutional framework for certification and training of fishermen, under the aegis of the Ministry of Transportation, is well established and accepted (see attached career path). Mandatory certification of Qualified Fishing Deckhands, Watchkeeping and Radar, Commercial Launch Master, Coastal Master, Mates, and Skippers (based on the British Merchant Marine system)has been in place for decades. The New Zealand Fishing Industry Training Council has recently proposed a certification and training program for Diesel Trawler Engineers which would be linked to the catching sector career structure.

Most training for fishermen, with the Ministry of Transportation approval, is through four post-secondary polytechnical schools. These schools provide the certificate training for the designated positions as well as a foundation year program for new entrants (Cadets). The current development of modular training programs through distance learning offers interesting options for the delivery of training to working fishermen.

#### Current Trends

European experts and policy makers have demonstrated considerable interest in the professionalization of fishermen. New approaches to social adjustment and to training and certification of fishermen are generally accepted as essential to addressing fleet over-capacity, poor conservation practices, economic marginality of fishing regions, and the constant need to improve quality and remain competitive.

The experience in many industrialized fishing nations indicates that the benefits derived from professionalization of fishermen are far reaching: significant improvement typically occurs in the conservation, management, enforcement, data acquisition, quality control, health and safety, and marketing aspects of the fishing industry. With professionalization, the fishermen assume greater responsibility for the resource. Self-regulation or co-management through professional organizations represents not only a shift of management responsibility but also a shift of the financial costs associated with fisheries management and control. Access to the resource is normally regulated and all participants must meet the minimum standards of competence identified for their position. These measures contribute significantly to the stabilization of incomes and development of the fishing industry.

In summary, professionalization improves fisheries management. The creation of a self-sustaining, viable fishery is beneficial for fishermen, coastal communities and society at large. Fishermen benefit from professionalization in terms of improved education, safety, status, employment security, income stability, career mobility as well as exercising greater control over management of the fishery. Canada's main

fish exporting rivals and trading partners are undertaking professionalization initiatives for fishermen, primarily to improve the quality of their products and the efficiency of their operations. Canada must look at similar programs if it is to remain competitive.

#### 5. THE ELEMENTS OF A PROFESSIONALIZATION PROGRAM

What are the elements of a professionalization program for fishermen? From the review of the domestic and foreign experience, such a program should include: establishing organizations for fishermen, implementing certification standards, developing training and education programmes, instituting income stabilization measures, involving fishermen in the fisheries management process, and increasing recognition (professional image) for the skills and expertise of the occupational group. The following are proposed as possible elements of a professionalization program for fishermen:

#### Organization

- Establishment of self-directed, financially independent fishermen's organizations;
- Establishment of an umbrella industry association (such as the NZFIB or the SFIA) financed by dues, levies on fish sales, etc. to coordinate and promote fishing activities;
- This umbrella organization should be mandated to coordinate fishermen's views on the development of: the definition of a *bona fide*, professional fisherman; training programs and training materials; mandatory certification standards; initiatives in areas of incomes and benefits; and an expanded role in fisheries management;
- Establishment of an industry training council within the umbrella association responsible for implementing the training and development strategy for the catching sector;

#### **Certification Standards**

 Development of a mandatory, graduated certification system for all fishermen based on standards of competence developed by industry in the workplace;

#### Training and Education Programs

- Development of a program to upgrade the skills and knowledge base of full-time, *bona fide* commercial fishermen grandfathered into the certification system;
- Development of accessible, flexible training programs (and training materials) tailored to meet the needs of fishermen;

- Development of training and apprenticeship programs for new entrants to meet the regulatory requirements (in high schools, vocational schools and community colleges);
- Development of continuing education programs through a network of community based training associations;
- Development of a training of trainers program;
- Coordination of education and training institutions' programs with the certification requirements and the needs of fishermen;
- Implementation of a single registry restricting access to the resource, licenses and government services to full-time, certified fishermen;

# Income Stabilization

- · Coordination of income and benefit programs;
- Development of government income adjustment programmes for those who are marginally attached;

#### Fisheries Management

 Creation of an active role for fishermen in the management of the fishery. Possible co-management or self-regulation of resource.

#### Professional Image

• Formal recognition of the skills and expertise required to meet the demands of the global modern fishing industry.

# 6. POLICY AND PROGRAM OPTIONS

We have reviewed the concept of professionalization and its importance to the future development of the Atlantic fishery. The experience with professionalization in Canada and abroad suggests that the Atlantic fishery would have a great deal to gain from such a process. What steps are required to implement a policy of professionalization in eastern Canada?

# Principles

Successful implementation of a policy requires a sound understanding of the underlying general principles. The following principles would govern the development and implementation of the professionalization policy for fishermen in eastern Canada:

- The definition of a "professional fisherman" for regulatory purposes must be developed and supported by the *bona fide*, fulltime, commercial fishermen attached to the Atlantic fishery;
- Professionalization and certification programs must be developed by *bona fide* fishermen's organizations to gain general acceptance within the fishing community;
- In areas where professional organizations are not established, the creation of such organizations is necessary to implement the professionalization process;
- A strategy to phase-in the proposed system of certification and training must be developed;
- Community level consultations conducted by fishermen's organizations should be held prior to implementing each phase;
- A successful implementation policy will "grandfather" experienced and highly skilled crew and skippers, establishing a training program and schedule for upgrading these participants. Those not meeting the criteria in the grandfather provision (new entrants, part-time fishermen, and others) will require training and certification;
- Different regions may have different timetables and priorities for developing and implementing certification programs;
- The certification system should be reviewed annually to reassess the standards of competence, training requirements, apprenticeship, training programs, and other elements of the professionalization process.
- Any attempt to restrict access to the fishery must address the lack of alternative employment options in the rural economy. Adjustment programs will be required.

#### **Opportunities and Constraints**

What policies are needed to promote professionalization of fishermen in eastern Canada? The experience with professionalization indicates that many fishermen in eastern Canada are already committed to professionalization. Professionalization does not necessarily require government intervention. Professionalization can be an industry led initiative. Government can most effectively promote professionalization by removing barriers to professionalization and by working with fishermen's organizations to develop supportive policies and programs. Government policies can act as a catalyst. Characterizing the professionalization process as one which is internationally recognized as beneficial to fishermen and coastal communities will create greater acceptance of the need for change. Presenting professionalization as a method of ensuring the health and safety of those fishing will reinforce the need to have standards of competence. Recognizing the profession's skill and knowledge requirements will promote the need for training. With professionalization fishermen will be able to adjust and compete in this rapidly changing industry.

# Constraints

What are the barriers to professionalization of fishermen in eastern Canada? Some of the most significant obstacles to professionalization include:

- comparatively low levels of education (literacy and numeracy) among many fishermen;
- a tradition of open access to the fishery;
- a lack of alternative employment;
- · alienation of fishermen from management decisions;
- distrust of collective action and a subsequent lack of organization (in some places); and
- a lack of familiarity with conservation and environmental issues.

The generally lower levels of education and technical training of Canadian fishermen compared to their counterparts in Norway, Iceland, New Zealand and in the U.K. may affect the pace of implementing certification and training programs. Non-traditional training and assessment methods will have to be considered to overcome this potential barrier. Open learning modules, videos, on-the-job training, and workplace assessment are possible options.

Controlling participation in the fishery may meet with resistance from those accustomed to easy access through the existing open registration and licensing system. Various policy options are available to rationalize access to the fishery. Non-professional commercial fishermen may be required to make a commitment to the sector, complete the requisite training and become formally accredited; or such individuals may be required to leave the sector; or, non-professional commercial fishermen may be permitted to participate in the fishery on a part-time basis, but will not be eligible for government services and other benefits reserved for professional fishermen. The lack of alternative sources of employment within the fishery and within the region in general for these individuals will have to be addressed.

Establishing training pre-requisites for new entrants in accordance with the statutory minimum level of competence will alter current operating procedures. Vessel operators are accustomed to recruiting crew for inshore fishing vessels from the unskilled, marginally attached labour force. Safety, survival, productivity, quality

are a few benefits vessel operators and crew will derive from recruiting trained new entrants.

Fishermen are currently not involved in the stock assessment or management process. Consequently, fishermen perceive the regulatory regime as an adversary rather than as the steward of their resource base. Management measures are often seen as suspect. In many areas a tradition of distrust of fishermen's organizations and a corresponding preference for individual relationships with government, fish buyers and markets has developed. Fishermen should play a central role in the design and development of the new system. The benefits from professionalization will have to be demonstrated to fishermen and fishing communities. An environment of trust and mutual respect will have to be created.

# Opportunities

As a first step towards professionalization it is necessary to eliminate or reduce the constraints (identified above) impeding the adoption of the proposed system. With the introduction of professionalization governments (federal and provincial) and industry have a unique opportunity to actively support change and promote progress.

# Fisheries Programs in High Schools

The problem of inadequate education originates with young people in fishing communities dropping out of secondary school at high rates. The development of fisheries training and relevant education could begin in primary school and continue throughout high school as in Norway and Iceland. Specialized streams for different sectors of the fishing industry could be included in the high school curriculum in designated communities. An apprenticeship program, linked to the certification system, could be part of the high school or vocational school program as in Norway. Students would be motivated to remain in school as the subject matter would be pertinent to their daily life and their future in the fishery.

# New Approaches to Fisheries Training

The implementation of a comprehensive certification system with specified training requirements will require minor adjustments and major changes in the existing institutional infrastructure for training delivery to the fishing sector. A coordinated program to meet industry standards and requirements would have to be developed, as in the U.K., among existing institutions. New approaches to training will undoubtedly need to be considered. Non-traditional training (open learning modules, videos, on-the-job training, individual tutoring) and the development of workplace assessment methods adopted in New Zealand and in the U.K. are possible options.

# Establishment of Professional Organizations and an Umbrella Association

In the U.K. and in New Zealand, the fishing industry has an umbrella association which represents and coordinates the various sectors. Different professional

organizations belong to the umbrella association. This model has been very successful. In order to influence policy and management decisions, fishermen, like all occupational groups, require a collective voice. The establishment of and membership in, professional fishermen's organizations is fundamental to fishermen effectively participating in the professionalization process. Further, the benefits to be derived from professionalization, (eg. co-management/self-regulation, income stability, pension plans, etc.) can only be realized through collective action. Government and industry can strengthen and promote the development of fishermen's organization process.

#### Professional Workforce Improves Management and Conservation

The new system would restrict access to the fishery to a professional workforce. Training would improve levels of safety, competency and productivity. Certification requirements would ensure a minimum standard of competence for all participants, with specific requirements for each position. Only qualified individuals would be exposed to the risks at sea. Only qualified individuals would handle the resource. These professional fishermen would be involved in enforcement, stock assessment, data acquisition, marine environmental protection and conservation. The opportunities to improve conservation and management through the empowerment and education of accredited fishermen are multifold.

#### Integrated Registration and Reporting System

With the introduction of the certification system for fishermen (as opposed to the existing open registry controlling minimum age and citizenship) an efficient, integrated registration and reporting system could be created. This integrated system would link certification, licensing, landings, income, employment and source deductions. The quality of the data obtained under this system and the accuracy of the reporting would be greatly improved through this initiative. With improved data and greater control on access, targeted income-support and stabilization programs are feasible. Only professional fishermen would be registered. Only registered fishermen would be entitled to species licenses, income support programs and government services.

#### Implementation Strategy

The major steps in the implementation strategy should include the following:

1. The federal government and fishing industry representatives should jointly issue a statement of principles regarding the professionalization process for fishermen, outlining the objectives of professionalization, the benefits from professionalization, the role of fishermen in determining the criteria for certification and registration, and the implications of professionalization for fishermen and fishing communities. This statement should reflect community consultation and fishermen's representatives concerns. 2. This joint statement should be reviewed and finalized at a Professionalization Conference, similar to the 1991 DFO sponsored Moncton conference. The DFO should reaffirm its commitment to fishermen's participation in all aspects of the professionalization and certification process at this conference. The future role of fishermen in management and conservation should be addressed at this time.

3. The conference should have the following objectives:

- review and approve the joint industry and DFO statement of principles for the professionalization of fishermen;
- define a "professional fisherman" and approve the proposed certification and registration system for occupational regulatory control;
- develop licensing requirements and eligibility criteria for income support programs and other government services based on the new system;
- develop a schedule for implementing the professionalization system taking into account regional variations; and
- establish a regional Training Council, as suggested at the 1991 Conference, comprised of fishermen's representatives, as well as other designated individuals from government, industry and academia, to develop and coordinate the certification standards and training programs;

4. Publish the official joint industry and government Policy on Professionalization and Certification as approved by the conference for broad dissemination.

5. Enact legislation reflecting the elements of the professionalization process as agreed;

6. Conduct joint consultations within the fishing communities at each phase of the process (led by the Training Council in cooperation with federal and provincial governments, industry, fishermen's organizations etc.).

7. Review and assess the implementation of the professionalization policy at an annual regional Professionalization and Certification Conference.

