

Assessing the road towards self-governance in New Zealand's commercial fisheries

M. Harte

Oregon State University

104 COAS Administration Building

Corvallis, Oregon, United States of America 97331

mharte@coas.oregonstate.edu

1. INTRODUCTION

The management of New Zealand's fisheries is widely regarded as a model for other fisheries around the world. To reach this position, government, customary Māori, recreational and commercial fishers, and other stakeholders have worked together to meet many challenges. The key has been a willingness to engage in a collective experiment in public policy development. Whether or not government, fishers and other interest groups choose to continue this experiment will determine whether New Zealand remains at the forefront of international fisheries policy and management.

One direction for the continued experiment is the transfer of greater responsibility for management to fishers through the devolution and delegation of statutory responsibilities. This involves setting national standards for the management of fisheries and dealing with fisheries in partnership with other stakeholders. Despite some successes (such as those discussed in later chapters in this volume), progress towards self-governance has largely stalled since 2000 and management has become increasingly centralized within government. This overview of New Zealand's fisheries management institutions will explain why New Zealand is at crossroads on the road to self-governance.

2. NEW ZEALAND'S FISHERIES SECTOR

2.1 Overview

The New Zealand exclusive economic zone (EEZ) is the fourth largest in the world at approximately 1.3 million square nautical miles. A characteristic of the EEZ is its depth, with 72 percent in waters more than 1 000 metres deep, 22 percent between 200–1 000 metres, and only 6 percent less than 200 metres. Fishing within the EEZ is heavily reliant on species found in waters at depths ranging from 200 to 1 200 metres, rather than species found in shallower waters. The fisheries resources in New Zealand's EEZ are not as abundant or productive as in many other parts of the world. Contributing factors include a narrow continental shelf, a lack of nutrient upwelling, and being on the periphery of the range of highly migratory species, such as tuna.

The commercial fisheries sector is New Zealand's fifth largest export earner. In 2003, the export value from the fishing industry was NZ\$1.2 billion (US\$700 million). These exports account for about 88 percent of the total New Zealand fisheries value. The industry is also a large employer, with some 26 000 people through direct employment and flow on effects. Unlike most other countries, the New Zealand industry receives no direct government subsidies.

The *Fisheries Act of 1996* forms the statutory basis for all fisheries management by the government. Separate management systems exist for recreational, customary Māori (New Zealand's indigenous peoples) and commercial fisheries. The purpose of the *Fisheries Act 1996* is to enable the utilisation of fisheries resources while ensuring sustainability. It includes provisions for:

- i. Environmental protection
- ii. Customary fishing regulations
- iii. Recreational fishing regulations
- iv. Bringing new species into the quota management system
- v. Resolving disputes between fishers over access and
- vi. Consultation on fisheries management.

Recreational marine fisheries are managed as open access fisheries and, as such, are either non-exclusive or excludable at only very high cost, and the rights to the fisheries are held in common. Recreational regulations determine daily bag limits, minimum fish sizes, method and gear restrictions, closed areas, and closed seasons.

The management of customary Māori fisheries is based on a territorial-use rights system wherein harvesting rights are restricted to specific groups or communities. Shares are allocated within the group through a variety of administrative or negotiated processes such as *rahui* (ban on taking of *kaimoana* [seafood]), *mataitai* (area of seashore that is managed as a traditional subsistence fishery by *iwi* or *hapu* [tribe or sub-tribe]), and *taiapure* (area managed by an *iwi* committee that has customary authority to make legally binding rules regarding access and exploitation rates). *Tangata Kaitiaki* (guardians) are nominated by *iwi* or *hapu* and appointed by the Minister of Fisheries to approve the collection of *kaimoana* for customary purposes. In most cases there is no exclusive access, though spatial exclusivity is guaranteed in the case of *mataitai*. Customary harvest is affected by (and in turn affects) extractions from the same stock by commercial and recreational fishers.

The main method for managing commercial fisheries is individual transferable quota called the "quota management system" (QMS). The characteristics, strengths and weaknesses of the New Zealand QMS are well documented in the fisheries management literature. (See, for example, Bess and Harte, 2000; Batstone and Sharp, 1999; Clark, Major and Mollet, 1988; Dewees, 1989; Harte, 2001; Hersoug, 2002; Memon and Cullen, 1992). For each QMS species, New Zealand's EEZ is divided up into a number of Quota Management Areas (QMAs). The Minister of Fisheries sets an annual total allowable catch (TAC) for each fish stock in each QMA. In general, the TAC is set at a level that ensures the fish populations remain at or above a level that will produce the maximum sustainable yield. An allowance is made within the TAC for customary Māori fishing, recreational fishing and any other sources of fishing-related mortality. The remaining portion of the TAC is the total allowable commercial catch (TACC).

The QMS is comprehensive in its application, and 92 species or groups of species representing over 85 per cent of the total fish catch are currently managed as 592 separate fish stocks. The large number of stocks arises for historical, biological and administrative reasons. Generally, New Zealand's EEZ is divided into ten QMAs. Unless there are biological reasons for aggregating quota management areas (or subdividing them further) each species is managed as ten separate stocks. The few remaining non-QMS commercial fisheries are managed through restricted entry licensing, catch limits and gear restrictions.

2.2 Government agencies with fisheries management responsibilities

Two government agencies give effect to the majority of the government's fisheries management responsibilities, the Ministry of Fisheries and the Department of Conservation. The costs incurred by these agencies in the management of fisheries are considered government fisheries management costs for public finance purposes.

TABLE 1
Responsibilities and functions of the Ministry of Fisheries

Core responsibility	Functions
Ensuring ecological sustainability	<ul style="list-style-type: none"> • Researching and monitoring the health of fisheries and the aquatic environment and the effects of fishing on the aquatic environment. • Specifying environmental standards related to the use of fisheries and the impact of fishing on the aquatic environment. • Maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations. • Setting, implementing and enforcing sustainability measures.
Meeting Treaty of Waitangi obligations to Māori	<ul style="list-style-type: none"> • Involving Māori in fisheries management decision-making. • Delivering 20 per cent of new quota to Māori. • Providing for and protecting customary fishing rights
Enabling efficient resource use	<ul style="list-style-type: none"> • Defining and allocating rights to use fisheries resources. • Providing management frameworks to allow rights holders to exercise those rights. • Recognizing and protecting New Zealand's fishing and conservation interests during the negotiation of international agreements.
Ensuring the integrity of management systems	<ul style="list-style-type: none"> • Evaluating and monitoring fisheries plans. • Setting standards and specifications for services such as research and registry administration. • Managing fisheries and aquatic environment information. • Delivering criminal law enforcement and prosecution services. • Ensuring management and information frameworks are consistent with New Zealand's international fisheries obligations.

The *Fisheries Act of 1996* requires the Minister of Fisheries to consult with stakeholders including Māori, the commercial fisheries sector, recreational fishing interests and environmental groups before making many statutory decisions.

The primary purpose of the Ministry of Fisheries (the “Ministry” or “MFish”) is to ensure that marine fisheries are sustainably used within a healthy aquatic ecosystem. The role of MFish, in collaboration with other government agencies, is advising on and implementing government policy in the following areas: ensuring ecological protection and sustainability; meeting international and Treaty of Waitangi obligations to Māori; enabling efficient resource use; and ensuring the integrity of management systems. For each of these core responsibilities, MFish exercises many functions as shown in Table 1. MFish has approximately 400 staff and has offices in 20 locations around New Zealand.

The Department of Conservation (DoC) has a statutory function to advocate for conservation of natural and historic resources. It has responsibility for marine reserves and protecting marine mammals and seabirds. MFish works with DoC on operational advice concerning protected species interactions with fishing and marine reserve proposals under the Marine Reserves Act. The views and input of DoC officials are often sought in the development of MFish policy. DoC regional offices interact with MFish staff at a local level on fisheries related issues. A Memorandum of Understanding formalises the way MFish and DoC work together. It is aimed at ensuring co-operation in a number of areas including: protected species/fisheries interactions, marine reserves, biosecurity risks, research, and the nature and extent of fisheries and conservation services.

2.3 Commercial stakeholder groups

2.3.1 *The New Zealand Seafood Industry Council Limited*

The New Zealand Seafood Industry Council Limited (SeaFIC) is an industry-owned, limited-liability company that represents the interests of harvesters, the marine farming sector, processors, retailers and exporters. It provides professional advice to government and the industry on fisheries management policies and practices and

scientific issues. SeaFIC's shareholders are Commercial Stakeholder Organisations that represent 94 percent of the productive value of the industry, the New Zealand Federation of Commercial Fishermen, the New Zealand Fishing Industry Association, the New Zealand Fishing Industry Guild, and the New Zealand Seafood Retailers and Wholesalers Association. A board of directors manages SeaFIC.

The company is organised into the following four business units: Science, Business Policy, Trade and Information, and Industry Training. The Science group is responsible for fisheries science, research and development, while Business Policy is concerned with fisheries law and regulations, property rights in capture fisheries and marine farming, and environmental issues. Trade and Information incorporates trade and international policy, seafood standards and the provision of information services to industry. The Seafood Industry Training Organisation (SITO) is responsible for facilitating competence-based training across all areas of the seafood industry including both industry-specific and generic skills. SeaFIC owns the Commercial Fisheries Services Ltd, which is described below.

2.3.2 Commercial Stakeholder Organisations

There are over 30 Commercial Stakeholder Organisations representing specific fisheries or geographic regions. Some of these are described in greater detail in the chapters that follow in this volume. They have several key functions in common (Bess and Harte, 2000):

- i. To facilitate the collection of funds to finance fisheries management activities, such as research or bycatch mitigation monitoring and to manage the delivery of such services.
- ii. To represent the interests of commercial fishers in consultative government processes such as the determination of fisheries management services and the setting of sustainability regulations.
- iii. To promote the expansion and development of commercial management rights.

The Commercial Stakeholder Organisations vary in organization and structure to best meet the needs of the commercial fishing interests they represent. Funding of these groups can be voluntary, by civil contract, or under the *Commodity Levy Act*.

The *Commodity Levy Act of 1990* enables many commodity-producing industries, including the seafood sector, to finance industry activities where voluntary funding would lead to a 'free-rider' problem or would be impracticable. To raise a levy under the Act, an industry group must hold a referendum and gain 50 percent support of those responding and 50 percent by volume of production. The levy is then compulsory. The Commodity Levy Order lasts for five years. To renew or amend the Order, a new referendum is required. SeaFIC is largest stakeholder organization to be funded under *the Commodity Levy Act*. The first *Seafood Industry Commodity Levy* came into force on 1 April 2002 and lasted until early 2007. It has recently been renewed until 2013.

2.3.3 Te Ohu Kaimoana

Te Ohu Kaimoana (Te Ohu) was established by the Māori Fisheries Act of 2004. Te Ohu is the corporate trustee of Te Ohu Kai Moana Trust, which is responsible for advancing the interests of iwi (tribal groups) in the development of fisheries, fishing and fisheries-related activities. Its main tasks are the administration, allocation and transfer of treaty settlement fisheries assets to mandated iwi organisations. Te Ohu plays a vital advocacy role on behalf of Māori. Te Ohu aims to provide a central voice when any legal reforms are proposed that relate to either the seafood sector or ownership/management of marine and freshwater environments.

Te Ohu is the sole voting shareholder in Aotearoa Fisheries Limited (AFL) and appoints their board of directors. AFL was established under the Māori Fisheries Act

2004 to maximise the value of Māori fisheries assets for the benefit of its iwi (tribes) and Māori shareholders. The company is a major player in the fishing industry and holds around half the total value of the Māori fisheries assets, estimated to be worth at least \$350 million. All iwi organizations recognized by Te Ohu under the *Māori Fisheries Act* hold income (non-voting) shares and receive annual dividends from the company.

2.4 Other stakeholders

There are a number of environmental groups such as Environmental and Conservation Organizations of New Zealand, The Royal Forest and Bird Protection Society, and World Wide Fund for Nature with strong interests in the sustainability of fisheries and the effect of fishing on the environment.

Marine recreational fishers do not belong to recreational fishing organisations. However, several voluntary recreational fishing stakeholder organisations represent or advocate for the recreational fishing sector. These include the Recreational Fishing Council, the Big Game Fishing Council and Option 4. Option 4 is a particularly active web-based recreational fishing organization that advocates a priority right over commercial fishers for recreationally caught stocks and a continuation of the current unlicensed open access marine recreational fishery management system (Option 4 2007).

Most customary Māori fishers are not adequately resourced to participate in statutory consultation processes, although programmes are in place to address this.

3. DEVELOPMENT OF FISHERIES MANAGEMENT INSTITUTIONS

3.1 Fisheries management and public sector reform

The evolution of fisheries management systems in New Zealand cannot be separated from the significant and far reaching changes in public sector management that occurred in the mid 1980s. Boston *et al.* (1999) note that public sector reform was dominated by issues relating to:

- i. The appropriate design of incentive structures and governance arrangements.
- ii. Avoiding provider capture¹.
- iii. Contestability² and external contracting of services.
- iv. The minimisation of transaction costs and agency costs.
- v. The tighter specification of public services as outputs and outcomes.

The resulting public sector reforms are characterized as (Stokes, Gibbs and Holland 2006, Hersoug, 2002):

- i. The decentralisation of management responsibilities.
- ii. A shift from input to outcome based management.
- iii. Commercialisation of many public services (e.g. science).
- iv. A shift in emphasis from public service to customer service.
- v. Separation of policy and operational responsibilities.
- vi. An output-related government agency funding system.

These reforms in New Zealand's public sector found particular expression within the fisheries sector (Harte, 2007; Stokes, Gibbs and Holland, 2006; Hersoug, 2002).

¹ Provider capture can refer to either the provision of public services such as fisheries research or the provision of policy advice. It occurs when one particular provider of services or advice "captures" a government agency purchasing the services or providing advice to decision makers by gaining the influence to determine the relevant public policy in their favour at the expense of the broader public interest. Jasanoff (1990) refers to it as when "an agency grown too close to those it seeks to regulate tends to accept unquestioningly the self-serving view of risk advanced by the regulated interests and their hired experts."

² Contestability helps avoid provider capture by allowing a decision maker or agency to take advice or purchase services from multiple sources. For example, a government minister may solicit advice from both a government agency and a public policy consultant. In another example, a government agency may tender out the provision of research services to external research providers rather than use a government department.

For example, commercial cost recovery was imposed in the 1980s. In the 1990s, there were moves to delegate and/or devolve some fisheries management functions from government to commercial stakeholder organizations.

3.2 Cost recovery

Funding of fisheries management in New Zealand has developed in response to public sector reforms and to changes in internal operating practices within the Ministry. The Ministry receives its funding as an appropriation from Parliament. *The Fisheries Act of 1996* enables the government to recover some of these costs from the commercial fishing industry through the cost recovery regime.

From 1985 to 1994, there was limited recovery of the public costs of fisheries management. Government recovered some costs through transaction fees and the government also required the commercial fishing industry to pay resource rentals for both quota and non-quota species. Approximately \$22 million a year of resource rentals were being paid by the commercial industry in 1994.

A cost recovery regime was introduced from 1 October 1994. The obligation to pay rentals was also repealed. In the first year of cost recovery the industry paid levies of around \$34.6 million. There was an expectation, however, that the levies would decrease over time as:

- i. Cost recovery brought efficiency gains within the Ministry because of the requirement to accurately identify the cost of services provided and because of the scrutiny of costs during annual consultation over the services provided to and costs to be recovered from industry.
- ii. Industry assumed a more direct role in fisheries management and the purchase of research.

The cost recovery regime operating from 1994 to early 2001 had several key features:

- i. The purpose of the cost recovery regime was to “enable the Government to recover its costs” in respect of fisheries services and conservation services.
- ii. The Ministry applied a policy known as the “avoidable cost” principle as a matter of administrative practice. This attempted to recover all costs incurred by the Government due to the existence of the commercial fishing industry.

Prior to fixing any annual levy, the Minister was required to consult with the commercial fishing sector on the costs to be recovered. Levy rates were set annually and paid in monthly payments.

As a result of external reviews in 1996 and 1998, changes were made to the cost recovery regime in 1999. The current regime came into full effect in early 2001. The central feature of the revised cost recovery regime is a statutory statement of principle on which cost recovery is based. Five principles in the Fisheries Act provide that:

- i. Persons who request a service must pay for that service.
- ii. Costs of services “provided in the general public interest, rather than in the interest of an identifiable person or class of person” cannot be recovered and are borne by the government.
- iii. Costs must, so far as practicable, be “attributed” to the persons who benefit from the expenditure.
- iv. Those who cause risk to or an adverse effect on the aquatic environment must, as far as practicable, pay the costs of services required to manage those risks or adverse effects.

A review of the cost-recovery rules and levying setting process, but not underlying principles outlined above, was announced in late 2006 (Cabinet Economic Development Committee 2006). It is supported by the commercial seafood sector and it is the first of the cost recovery rules since 2001; it is intended to recognize changes in fisheries management over the previous six years. Important objectives that are to ensure revised rules are:

- i. Reflect changes in technology or the provision of management services since 2001.
- ii. Create incentives for innovation in service provision.
- iii. Improve incentives for environmental performance by the seafood industry.
- iv. Better allocate non-specific costs to those who benefit from the provision of those services.
- v. Reduce the complexity of the levy order process.

The aggregation of non-specific costs and spreading their recovery across all quota owners is of particular concern to the commercial sector. The current rules require these costs to be allocated by application of the “port price index”, a measure of the relative values of fishstocks determined through an annual survey of port prices (also called ex-vessel or green-weight value). Concerns with the use of the port price index and the levy order process include:

- i. the accuracy of the index as a measure of stock value
- ii. doubts over how well the index gives effect to the cost recovery principles
- iii. how equitable it is in practice? When the rules were introduced, there was no more satisfactory measure available, so this was difficult to assess.
- iv. the complexity and costs to administer the index.

3.3 Delegation and devolution of research and registry services

The Ministry of Fisheries and the commercial sector continued to push for institutional reforms during the 1990s. An independent review of the Fisheries Act of 1996 conducted in 1998 contained many “radical” recommendations about the role of the government and the role of stakeholders. The reviewer recommended that the Act be amended to enable the Minister to devolve fisheries management functions to rights holders groups, to provide for mandated quota owner associations and to provide suitable compliance regimes for devolved management functions.

Amendments to the Fisheries Act in 1999 and their subsequent implementation went part way in implementation of the independent reviewer’s recommendations. The amended Fisheries Act allows many duties and powers of the Chief Executive of the Ministry to be delivered either by MFish or by a service delivery agency under a contract. The Chief Executive retains accountability for the provision of a contracted service. Most fisheries research services in New Zealand are contestable services. This means that in principle they do not have to be carried out by MFish but can be contracted out to a third party.

The Act also provides for devolved services, where an external organisation has responsibility for both purchasing and ensuring the provision of relevant services, with the agreement of the Minister of Fisheries. In such cases, the Chief Executive of the Ministry of Fisheries is no longer accountable for provision of the service. Once functions, duties, and powers are devolved to an external organisation, the specific related services become the sole responsibility of the organisation to deliver. Failure to comply with the statute and standards and specifications can lead to civil sanctions imposed on the organization.

4. THE IMPACT OF MANAGEMENT REFORM AND SELF-GOVERNANCE

The relative success and failure of these far-reaching reforms can be seen in three areas: (a) devolution of quota registry services, (b) stakeholder purchase of research services and (c), reduction in the real cost of commercial fisheries management.

4.1 Devolved QMS registry services

Table 2 lists the registry-based QMS services that are devolved or contracted to the New Zealand SeaFIC as an approved service delivery organisation. These services are provided by Commercial Fisheries Services, a wholly-owned subsidiary of SeaFIC that

TABLE 2

Devolved and contracted quota management system services provided by FishServe

Devolved QMS Services	Contracted (delegated) QMS Services
i. Registering clients and vessels.	i. Delivery of catch effort services, including issuing return books and the returns management process.
ii. Licensing fish receivers.	ii. Issuing fishing permits.
iii. Issuing catch return books and operating returns management processes including electronic data transfer for statutory reporting.	iii. Registering foreign owned vessels, charter vessels, and fish carriers.
iv. Processing quota and annual catch entitlement transactions, including mortgages and caveats.	iv. Monitoring catch limits.
v. Reconciliation of fishers' actual catches against their catch entitlements.	v. Delivery of revenue services, including invoicing, receiving and debt management of cost recovery and deemed values.

Source: Harte (2007).

TABLE 3

Cost of FishServe to the industry (millions of current NZ\$)

Year	Contract	Devolved	Total	Staff
2000/01	\$8.65	N/A	\$8.65	84
2001/02	\$5.65	\$1.98	\$7.63	82
2002/03	\$4.57	\$1.78	\$6.35	73
2003/04	\$4.12	\$1.64	\$5.76	69
2004/05	\$4.03	\$1.51	\$5.54	65
2005/06	\$3.38	\$1.50	\$4.98	58

Source: Craig (2007).

operates under the company name "FishServe" (Harte 2007). Essentially, FishServe provides most accounting services for implementation of the QMS.

Registry service provision by FishServe has been an unqualified success. The annual cost of registry services to the industry has decreased annually from NZ\$8.65 million in 2000/01 to NZ\$4.98 million in 2005/06 (Table 3). The volume of data transferred electronically grew in the same period from 68 percent to 95 percent of all registry transactions.

The reasons for the success of FishServe are fourfold (Campbell 2005). First, the 1999 amendments to the Fisheries Act provided for more streamlined administrative processes that could be delivered by FishServe more efficiently. Second, FishServe is more innovative and less bureaucratic because it is a private sector company and has more operational flexibility. Third, industry has invested in FishServe to acquire new technology that brought major efficiencies. Fourth, given industry ownership, the internal incentives exist for FishServe to reduce costs. If FishServe loses industry support, the industry might look elsewhere for devolved services.

4.2 Stakeholder purchase of fisheries research services

Until 1999, there was little prospect that the responsibility for fisheries research could be delegated to commercial fishery organizations. Research was considered a core responsibility of government and too important to be trusted to fishery stakeholders. The 1999 amendments to the Fisheries Act provided for stakeholder purchased services. These are services for which the Ministry retains accountability but which stakeholders are allowed to purchase directly. The costs of directly purchased services are then removed from the cost recovery regime. It was initially intended that some approved fisheries research services could be purchased directly by industry, thus avoiding high MFish overheads and giving the industry more responsibility.

Directly purchased research was expected to increase economic efficiency due to the lower transaction costs for stakeholder organization to run and to fund research (Harte 2001). Enhancement of a commercial fishers stewardship ethic was seen as another benefit, since they would be directly involved in the purchase and execution of sustainability research rather than indirectly involved through centralized consultative processes. These benefits have been demonstrated in the case of the two commercial fisheries, the Rock Lobster Industry Council and Challenger Scallop Enhancement Company. Both are discussed in detail in separate chapters in this volume.

The Rock Lobster Industry Council (RLIC) represents commercial rock lobster interests. The RLIC has become an accredited research provider to the Minister of Fisheries and has successfully tendered for, and executed, a number of rock lobster stock assessment and related contracts. Research contracts are undertaken in collaboration

with national science providers and internationally recognized stock assessment consultants contracted to RLIC. RLIC also uses accredited technicians employed by science providers to undertake an extensive stock-monitoring programme.

The Challenger Scallop Enhancement Company (CSEC) has for many years managed scallop enhancement programmes, including all research, in its area. The main research programme carried out by CSEC is an "annual abundance survey" of stocks. CSEC has improved the precision of this survey at least threefold since taking over this responsibility due to demands from shareholders and fishers. The company needs the information for its business plan and to set levies, as well as to provide the scallop fleet with accurate data about the location of scallops. CSEC runs its own geographic information system for this purpose. In addition, the company commissions independent researchers to provide information on the possible environmental impacts of its scallop harvesting and the company's enhancement activities.

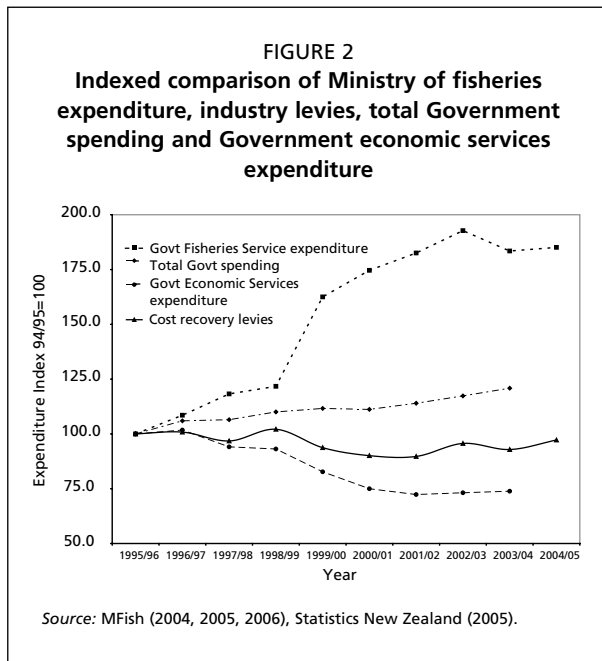
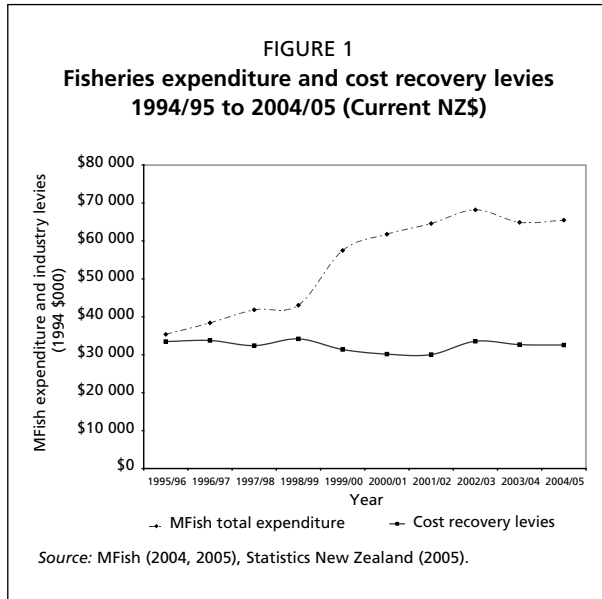
Despite the success of RLIC and CSEC with directly-purchased research, further growth of stakeholder purchased research by other commercial stakeholder organizations has been impeded by a number of factors (Harte 2001, Stokes, Gibbs and Holland 2006). First, there has been opposition by environmental non-governmental organizations and some scientists who believe fishery research is a core responsibility of government. These groups have claimed that industry has a strong incentive to distort the results of research or to pressure contracted providers for short-term gain. Second, some segments of the fishing industry perceive that direct purchase means devolution of management responsibility rather than the narrower delegation of Ministry research purchasing functions. This led them to oppose being accountable to the Ministry for the delivery of required research services. This made MFish reluctant to deal with some segments of the industry and also appeared to give credibility to the concerns of environmentalists. Third, both SeaFIC and MFish overestimated the capacity of many commercial fisher organizations to fund and manage complex fisheries research projects. Fourth, there was insufficient collaboration between the fishing industry and the Ministry over the development of the direct purchasing regime. A formal programme of collaboration would have substantially resolved many of the first three issues.

In late 2000, a new Minister of Fisheries became reluctant to delegate research responsibilities to industry. The embryonic policy to encourage the widespread direct purchase of research was officially "put on hold" for further policy evaluation. It remains on hold some seven years later. Stokes, Gibbs and Holland (2006) suggest that since 2000 the government has made little clear progress in encouraging efficiency and in fostering competition in the provision of fisheries research. Of 241 projects tendered out through the contestable process, they found 159 (66 percent by number and 84 percent by value) attracted a sole bid and were awarded to the sole bidder. A further 54 (22 percent by number and 11 percent by value) attracted two bidders, and 11 were awarded as direct contracts. Only 17 attracted more than two bids. No contracts were awarded to offshore international research companies. NIWA, the traditional research provider for the Ministry, which is also a state-owned research enterprise created during public sector reforms, was awarded 206 of the 241 contracts awarded (85 percent by number and 91 percent by value).

4.3 Controlling the cost of commercial fisheries management

Figure 1 shows trends in Ministry expenditure and cost recovery levies under cost recovery from 1995/96. Total Ministry expenditures increased from NZ\$35 million to NZ\$66 million (in 1995/96 dollars), but commercial cost recovery levies have remained constant at between NZ\$30 million and \$33 million since 1995/96.

Figure 2 provides an indexed comparison of changes in MFish expenditure and cost recovery levies with the change in total Government expenditure and in like Government agencies for the period 1994 to 2004. MFish is classified as an economic services



department for public finance purposes. Similar departments include the Ministry of Commerce and Ministry of Agriculture and Forestry. Total government expenditure on fisheries services has increased dramatically compared to changes in overall government expenditure. The difference in overall trends is even more marked when compared to similar agencies. Overall government expenditure increased by 21 percent in inflation adjusted terms between 1994 and 2004. Expenditure in similar government departments fell by some 23 percent as government continued its policy of less direct intervention in the economy. In contrast, MFish expenditure increased by 85 percent.

This divergence of total fisheries management costs and commercial fishery management costs suggests two trends (Harte 2007). First, efforts by MFish and the seafood industry to improve the efficiency of commercial fisheries management have largely been successful. Second, fisheries management has become more complex and more expensive in the period 1994 to 2005. This complexity required increases in the total Ministry budget and staff to work on non-commercial fisheries management issues such as recreational and customary fisheries management, non-commercial fisheries related research, and the detection of illegal black market and poaching activities (Harte 2007).

5. THE FUTURE OF SELF-GOVERNANCE IN NEW ZEALAND

The public policy experiment in New Zealand commercial fisheries management has by and large been successful, at least from an

institutional perspective – the full costs of managing commercial fisheries are recovered from the commercial sector and transparency and accountability in the delivery of commercial fisheries management services have been created. The commercial sector has been meaningfully involved in the determination of commercial fisheries management services and in the successful delivery of some fisheries management services. The combined use of cost recovery and the devolution and delegation of a few, but significant, management functions has generated efficiencies in the delivery of fisheries services.

Several interrelated factors led to this success. First, an ethos of transparency, efficiency and accountability is pervasive in the New Zealand public services. Second, government agencies have strong policy and operational capabilities. Third, the commercial fishing sector has a durable set of fishing rights and can be held accountable for cost recovery and the delivery of fisheries services. Finally, the industry has developed effective commercial stakeholder organisations that can engage government agencies in constructive dialogue and negotiation on issues such as cost recovery and self-governance.

Despite such success and despite the foundations for further success, the future of commercial fisheries management reform in New Zealand is unclear. The potential for more than incremental changes in fisheries policy is constrained by the pressure on management agencies to meet an increasing variety of issues and challenges from multiple stakeholders. The management debate is shifting from relatively practical issues such as the apportionment of management costs to an ideological focus on the relative role of the government and industry in the management of commercial fisheries.

Many in the commercial industry and in MFish consider the future lies in the development of fisheries plans (MFish 2004, 2007). Fisheries plans offer a way to make fisheries management more responsive to the circumstances of particular fisheries. Fisheries plans can be developed by either Māori, stakeholders, or by MFish. MFish expects to develop most plans in collaboration with Māori and stakeholders (MFish 2007). The fishery-specific focus and increased stakeholder involvement in fisheries plans is expected to increase the level of innovation brought to fisheries management decisions.

Stakeholder-developed fisheries plans must meet MFish standards and specifications. There is considerable flexibility as to what a plan may contain, e.g. stakeholders may elect to focus their efforts on specific management issues. In contrast, it is expected that MFish-led plans will address all aspects of management for a fishery. If the Minister approves a stakeholder fisheries plan, any associated MFish strategy will be updated to reflect the fisheries plan and to avoid duplication or incompatibility of government services with services delivered by stakeholders. The seafood industry believes that MFish statements regarding the comprehensiveness MFish-led plans and their expectation to develop the majority of plans is evidence of a potential MFish retreat from a policy of promoting self-governance in New Zealand's fisheries (Gibbs 2007).

The diversity of New Zealand's fisheries and marine areas means that fisheries plans will vary widely. Plans will evolve. They may begin with a limited set of objectives and management proposals and then expand in scope as stakeholders gain experience. At their most ambitious, commercial stakeholder organisations could become responsible for the delivery and purchase of a wide range of commercial fisheries services. At their narrowest, MFish-developed plans could entrench the status quo and become a straightjacket that limits further institutional reforms in New Zealand's fisheries sector.

The future of self-governance as a core principle in New Zealand's fisheries management is at a crossroads. Mechanisms, both legislative and institutional, allow for self-governance to occur; yet neither MFish nor the seafood industry has become wholly comfortable with the concept. For self-governance to become a mainstream feature of New Zealand's fisheries management regime, two things must happen. First, MFish must remain open to and actively facilitate stakeholder-led fisheries plans. The enunciation of fisheries management plans suggests that self-governance is not a core policy objective, despite previous successes. Second, the seafood industry must invest much more in the development of institutions and human capital within fishery-specific commercial stakeholder organizations. Successful commercial self-governance has only occurred in New Zealand when this has happened. The seafood industry will remain reluctant to make this investment until MFish signals clear support for self-governance. This appears unlikely in the short to medium term.

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