New Zealand’s Fisheries Quota Management System

Purpose: Information
Submitted by: ABAC New Zealand
APEC HIGH LEVEL POLICY DIALOGUE ON FOOD SECURITY AND BLUE ECONOMY

Session 1: Blue Economy towards sustainable food supply chains for food security

Sustainable fishing technologies (sharing of best practice from ABAC / Private Sector New Zealand)

New Zealand’s Fisheries Quota Management System - Presented by ABAC PPFS Co-Chair Mr Tony Nowell of ABAC New Zealand

EXECUTIVE SUMMARY

New Zealand fisheries management quota management system (QMS) – The Quota Management System is the overall framework for managing New Zealand fisheries. Introduced in 1986, it ensures the long-term sustainability of our fish stocks, the health of our marine ecosystem, and the gainful employment of over 26,000 New Zealanders. The Ministry for Primary Industries is responsible for managing this framework, with the Minister setting annual catch limits for all quota species. It is one of the most extensive quota-based fisheries management systems in the world, with over 100 species or species complexes managed within this framework.

The Quota Management System (QMS) lies behind New Zealand’s reputation as a world leader in sustainable fisheries management. It was introduced in 1986, to conserve major fisheries stocks and help make the seafood industry more efficient.

Total Allowable Commercial Catch

Ministry for Primary Industry scientists and other stakeholders, including industry, work together to assess the population size of all major commercial fish species in their major fishing grounds. These areas are called Quota Management Areas (QMAs).

Using the assessment data, the Minister for Primary Industries then sets an annual Total Allowable Catch (TAC) limit for each QMA. The TAC is set conservatively, so that enough fish remain to maintain breeding future populations.

In fisheries where non-commercial users fish (e.g. customary Māori or recreational fishers), a quantity of stock is set aside for them before the commercial catch (TACC) is set.

The TACC is set in volume (e.g. tonnes) allowed to be caught each year by commercial fishers and can vary from year to year. It is divided into a number of Individual Transferable Quotas (ITQs), which are effectively rights to fish a defined portion of the TACC.

For the TACCs of the top ten commercial fish species, see their individual pages in Fish species.

Individual Transferable Quota

An Individual Transferable Quota (ITQ) is the right to harvest a defined amount of a species (percentage by weight of the TACC) in a specified area during one fishing year. The quota rights can be transferred to another person or company through either sale or lease. For most quota-managed species the year runs from 1 October to 30 September.
If someone holds quota for 6% of the TACC for a particular species in an area, they hold the right to harvest 6% of that area's TACC. However, the amount harvested will change each year - depending on what the year's TACC volume is set at.

A monitoring process ensures that actual landed catches are always matched against someone's quota.

When a species is first brought under the Quota Management System, Māori are given 20% of the total quota. The remainder is distributed amongst those people who hold commercial fishing permits for that species - based on how much they caught over previous years.

Quota is an asset and can be sold, leased or given away just like a piece of land. Its value depends on the market value of the species, the TACC and demand for that particular quota. Most quota trading is by personal contacts and advertisements in daily papers and in the seafood trade magazines. There are also a number of well-established quota broking companies.

All quota trades must be registered with FishServe, who provide registry services to the New Zealand commercial fishing industry for the Quota Management System. The Fisheries Act limits how much quota any one person or company can own - so that no one company or individual can develop a monopoly on fishing in any one area or for any one species. These aggregation limits are set by the Ministry for Primary Industries, in consultation with Seafood New Zealand and other industry representatives.

Supporting documents and media:

PowerPoint Presentation: QMS Helson – New Zealand Quota Management System Updated

Video: Seafood New Zealand Our Story.mp4

Paper (1): New Zealand Fisheries Management System

Paper (2): A history of New Zealand’s Quota Management System
New Zealand’s Quota Management System

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7. Industry functions performed for MPI
Role of the Ministry

• Responsibility spans the agriculture, horticulture, aquaculture, fisheries, forestry, food industries, animal welfare, and the protection of New Zealand’s primary industries from biological risk.
• The Ministry is the single key adviser to the Government across all aspects of the primary industries, food production and related trade issues.
• Key policy, regulatory, compliance and verification role.

Core Functions for Fisheries

• Policy and regulatory framework
• Research planning and evaluation of science outputs
• Enforcement of fisheries rules
• Trade access and participation in RFMOs
• Quality assurance of food produce, include sanitation and trade requirements
• Support industry innovation – primary growth partnership
New Zealand’s EEZ

- EEZ & Territorial Sea
  - 4.4 million km² (world’s 5th largest)
  - 15 times land mass
  - 72% below 1000 m
- Coastline: 15,000 km
- 16,000+ marine species
- 1,300 fish species
New Zealand fisheries

- Species commercially fished: 130
- Species in QMS: 100+ species/species complexes (most comprehensive ITQ system)
- Total Catch: 429,000 tonnes (year ended June 2012)
- Total quota value: SNZ 4 billion
  - Top 20 species contribute 91% of value
  - Increased by 40% between 1996 & 2007
- 1,400 commercial fishing vessels
- 1,500 quota owners
- 226 fish processors & traders
- 8,000 directly employed
- 90% of NZ’s commercial seafood production is exported
- Seafood export earnings account for around 3.5% of total merchandise trade.

Wide range of QMS species
## Seafood Exports, Values and Volumes

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<th>YEAR TO 30 JUNE</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<td>Export Volume (000 tonnes)</td>
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<td>261</td>
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<td>FOB price ($/kg)</td>
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<td>Export Volume (000 tonnes)</td>
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<tr>
<td>FOB price ($/kg)</td>
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<tr>
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<tr>
<td>Export Volume (000 tonnes)</td>
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<td>FOB price ($/kg)</td>
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* 2015 figure estimated on data up to December 2014

### New Zealand Seafood Exports

**Apr 14 – Mar 15**
Seafood Export Markets

AQUACULTURE EXPORT EARNINGS
(DECEMBER YEAR 2014)
Application of the QMS

- QMS applies only to commercial fishers (those that sell fish)
- Commercial fisheries must have a commercial fishing permit
- Non-commercial fishers have open access (no licence or permit)
- For QMS the first step is determine the management unit (species or species complex) and area
- Then set a catch limit
Management Areas

- Areas based on:
  - Distribution of species
  - Related fisheries
  - Administrative purposes (10 default areas)
- Each area represents a fishstock

Setting a Catch Limit for a Fishstock

- A Total Allowable Catch is set for each fishstock
- The TAC is the sustainable annual catch that can be taken collectively by all fishing sectors
- The TAC is set so as to maintain a stock at a level that can produce the maximum sustainable yield (so consistent with UNCLOS)
- The TAC is allocated between fishing sectors – commercial, non-commercial fishers
- The TAC is supported by rules about fishing areas, seasons, size limits, sex and state
Overview of New Zealand Fisheries

The Quota Management System

Commercial Fishing Rights

Forms of Rights

- The QMS applies to the commercial allocation of the TAC
- Under the QMS two forms of commercial rights exist – ITQ (quota) and ACE (annual catch entitlements)
- Quota was originally granted to existing commercial fishers based on catch history
- Now the quota rights are tendered by the Government (sold to highest bidder)
Quota

- Individual (rather than collective ownership)
- Transferable (restrictions on aggregation of quota; overseas ownership)
- Perpetual
- Divisible (can be broken into smaller units)
- Represents a proportional share of the commercial catch limit for each fishstock
- Can be offered as a security

Annual Catch Entitlement

- Quota generates an annual harvest right known as ACE
- ACE is expressed in tonnes. The total amount of ACE generated equals the commercial catch limit
- The quota owner receives a proportional share of the commercial catch limit based on his quota holding
- So 10% of the quota shares for a fishstock with a 100 tonne catch limit generates 10 tonnes of ACE each year
- ACE can be traded
How it works

- A quota owner can choose to fish or sell their ACE
- A commercial fisher must have a permit; he does not need to own quota
- There is no requirement to hold ACE before fishing
- A commercial fisher must balance his catch against ACE holdings for each fishstock

Operation of the QMS
Balancing of Catch

- An economic disincentive (known as a deemed value) is used to remove the economic benefit of catch above ACE holdings.
- Any monthly shortfall of ACE incurs an interim deemed value.
- If the fisher sources ACE before the next balancing date they are refunded the interim deemed value.
- At the end of the fishing year, any shortfall of ACE relative to reported catch incurs the full deemed value.
- Setting the deemed value too high can lead to dumping; set too low can result in overcatch.

How do we ensure fishers balance correctly

- Fishers must report catch (species, area, lats & longs, time).
- Fishers must land catch to a licenced fish receiver.
- The fish receiver must report catch received.
- Monitoring: observers (over 10,000 sea days); Vessel Monitoring System; maritime surveillance; forensic analysis of fishing records; camera trials.
- Use of conversion factors (convert processed state back to greenweight).
Consequences of the QMS

Rationale to introduce the QMS

- Prior to the QMS, NZ’s deepwater fisheries were fished by foreign fishing fleets
- The coastal fisheries were overfished, in crisis
- The QMS was introduced in a period of economic reforms
- A deliberate strategy was adopted to remove part-time fishers so to remove over-capacity
- Interest in New Zealandisation of fishing fleet
How successful has been the QMS?

- Reputation of leading fisheries management regime
- Benefits from stopping the race for fish (safety, continuity of supply)
- MSC certification of 3 fisheries; more under assessment
- Quota a valuable asset (increased by 40% between 1996 & 2007)
- Ability to constrain catch when fishstocks depleted, not avoid fisheries being depleted
- Aggregation of quota
- Continued use of foreign charter vessels, not cost effective to invest in deepwater vessels
- Overcapacity remain in inshore fisheries

Challenges

- Quality of information is crucial
- Dumping of fish is common problem to all fisheries regimes
- Number of species in QMS complicate balancing
- Split between ITQ and ACE has changed dynamics of regime
- Fluidity of ACE market
Key Choices

- Fisheries waters (coastal versus offshore)
- Specific species
- Individual, community, or overseas ownership
- Forms of rights – ITQ, ACE, ITQ tied to vessel, fixed term versus perpetual rights, tradability
- Allocation of rights – catch history, tender, award to selected groups
- ITQ or ACE before fishing or retrospective balancing
- Aggregation of quota
- Cost recovery
Roles

• Ministry has core regulatory function
• Support industry innovation and trade access
• Industry bodies: single umbrella organisation and quota owner bodies based around fisheries
• Industry bodies use levy order to fund activities

Industry Activities

• Research – commission own research and undertake research on behalf of MPI
• Registry services (administration of permits, quota and ACE register, balancing regime) undertaken by industry owned company. Required to meet Government standards and specification in performing these services
• Measures undertaken to support regulatory management of fishstocks (area, species catch limits)
Kermadec Ocean Sanctuary

- One of the largest marine protected areas in the world, spanning an area of 620,000 sq km. The sanctuary is in the South Pacific Ocean, about 1000km north-east of New Zealand, and expands a marine reserve that surrounds a clutch of small islands.
- The scale of the sanctuary will dwarf any previous New Zealand protected area, spanning twice the size of the country’s landmass. It will cover 15% of New Zealand’s exclusive economic zone.
- Under the International Union for Conservation of Nature (IUCN) Protected Areas classification system the Kermadec Ocean Sanctuary will have the highest level of protection: category I – strict nature reserve/wilderness area.
- Commercial and recreational fishing will be completely banned, as will oil, gas and mineral prospecting, exploration and mining. Key’s government aims to pass legislation establishing the sanctuary next year.
- The area is considered crucial in terms of biodiversity, featuring nearly 35 species of whales and dolphins, 150 types of fish and three of the world’s seven sea turtle species.

"The Kermadecs is a world-class, unspoiled marine environment and New Zealand is proud to protect it for future generations" (Prime Minister John Key last week at the UN)