

IFAB 2013 SEAFOOD REVIEW

JANUARY 2014 V1.00B











The Food and Beverage Information Project

The Food & Beverage Information Project is the first comprehensive overview of the state of New Zealand's Food & Beverage (F&B) industry. Part of the Government's Business Growth Agenda (BGA), it is an integrated programme of work focusing on the six key inputs businesses need to succeed, grow and add jobs; export markets, capital markets, innovation, skilled and safe workplaces, natural resources and infrastructure.

Essentially, the BGA Export Markets goal will require lifting the ratio of exports from today's rate of 30% of GDP to 40% by 2025. This equates to doubling exports in real terms (or tripling exports in nominal non-inflation adjusted terms). This in turn equates to achieving a 7% per annum growth rate over the next twelve years.

This five-year project analyses the main sectors in F&B, including dairy, meat, seafood, produce, processed foods, and beverages, as well as providing an overview of how the industry is fairing in our major markets. It also conducts in-depth sector reviews on a rotating basis. The information is updated annually and feedback from users shows the project is acting as a vital tool for companies looking to expand and grow exports.

Why Food & Beverage?

The Food & Beverage industry is vitally important to the New Zealand economy. Food & Beverage accounts for 56% of our merchandise trade exports and one in five jobs across the wider value chain. In addition, F&B acts as a vital ambassador for the country, being in most cases the first exposure global consumers get to "Brand New Zealand."

New Zealand's F&B exports are growing strongly and the country's export performance is strong and improving relative to peers. In the 15 years leading up to 2010, New Zealand's food and beverage exports grew at a compound annual rate of 7% per annum. So one way to look at the challenge is to ask – can we continue to grow our food & beverage exports at the same rate? To understand if this is possible we need to know what has been driving our success.

What is the purpose of the food and beverage information project?

The project pulls together the available information on the food and beverage industry into one place, in a form which is familiar and useful to business. The reports contain analysis and interpretation of trends and opportunities to materially assist with business strategy and government policy.

The information will be of vital use to businesses, investors, government, and research institutions as the industry expands and diversifies. This industry view will be very useful to government, enabling better dialogue and the opportunity to address issues collectively.

What benefit will this bring to businesses?

The Project will have many uses for businesses. These include:

- As a base of market intelligence to enable business to be much more targeted in their own market research
- Reviewing and informing offshore market development (including export and investment) strategies
- Assisting in identifying areas of innovation and R&D for the future
- Identifying strategic partners and collaborators
- Enabling a company to benchmark performance with that of its competitors
- Monitoring industry activity
- Gaining a better understanding of their own industry sector
- Identifying internal capability needs or external inputs

How will government use the reports?

This information will provide much greater insight into the industry, which is useful for a range of policy development, from regulatory frameworks to investment in science and skills and facilitating access to international markets. In particular, a single source of factual information will enable government agencies to better coordinate their efforts across the system and be more responsive to addressing industry issues.

iFAB 2013











OTHER RELATED **IFAB** REPORTS



This analysis of the New Zealand seafood sector forms a part of the wider Food & Beverage Information Project













Other reports, including those from previous years, are available on the MBIE or Coriolis website...







BENCHMARK - EXPORT GROWTH BY SECTOR



In 2012 seafood was the third fastest growing core food & beverage super-category in absolute dollars and fourth in percent growth terms

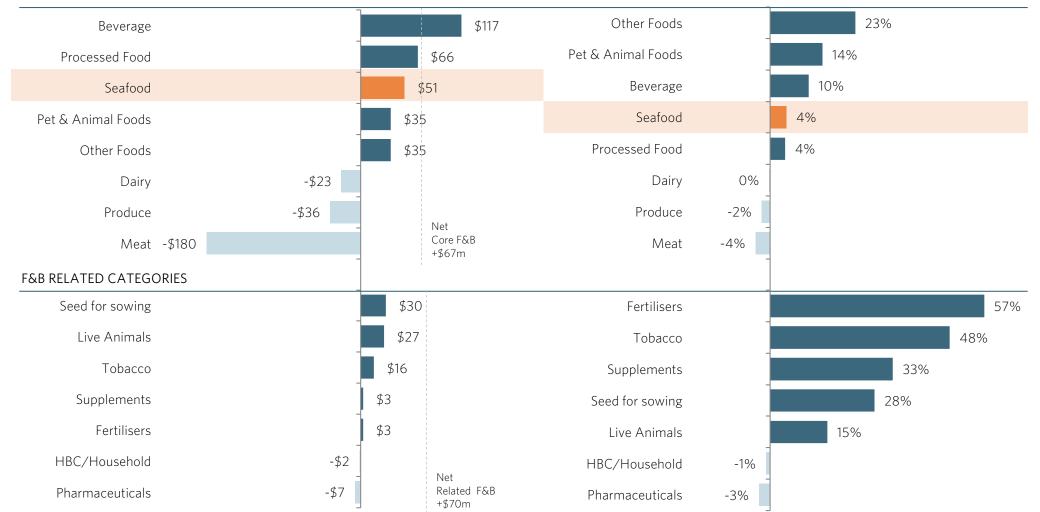
ANNUAL CHANGE IN EXPORT VALUE BY TYPE

US\$m; 2012 vs. 2011

PERCENT CHANGE IN EXPORT VALUE BY TYPE

%; US\$m; 2012 vs. 2011





SEAFOOD - SITUATION - WILD CATCH



While New Zealand has a large and sustainably managed wild catch fishery, there is little likelihood of volume or throughput increases going forward

New Zealand

New Zealand has access to a strong set of natural resources for wild catch fishing. The country is an isolated island nation in the middle of the South Pacific, 2,100 kilometres from Australia. It has the <u>sixth</u> <u>largest</u> exclusive fishing area (EEZ¹) and the <u>tenth longest</u> coastline of any country in the world.

Multiple sources suggest New Zealand's fisheries are among the most sustainable fisheries in the world (on a par with Alaska and Iceland). New Zealand uses effectively the same catch management system as Iceland. However sustainable management has led to a decline in total wild catch over the past 15 years and there is low potential for substantial future growth.

New Zealand has an efficient, modern seafood industry with large modern boats, in particular the deep sea freezer trawlers. NZ achieves a 7% share of the temperate Southern Hemisphere (S.H.) wild catch. 2 130 species are commercially fished in New Zealand's EEZ 1 , a similar species mix to Australia, Chile, Argentina, etc. The main catch by volume is hoki, followed by orange roughy.

Wild catch fishing is reasonably consolidated, with a handful of major firms and a range of secondary firms. Consolidation is more pronounced in deep water fishing, less so in closer waters.

The industry has mixed ownership, with New Zealand Maori tribal interests predominating, but with one listed firm (Sanford) and strong private ownership and foreign investment (primarily Japanese).

Competitors

New Zealand competes in the first instance with other colder water Southern Hemisphere countries, primarily Australia, Chile, Argentina, and South Africa. Secondarily, this group compete with Northern Hemisphere colder water fisheries, including Norway, Canada, Iceland, USA/Alaska, UK/Scotland.

Globally the wild catch seafood industry is fragmented with a huge number of medium to small sized firms competing. In-shore fishing is highly fragmented and primarily local around the world. Deepwater fishing is more consolidated due to capital requirements for large boats, but still fragmented globally.

Consumers/Markets

Consumption per capita of wild capture seafood has been flat-to-declining globally, due to overfishing and/or population growing faster than capture quantity.

Increased consumer demand for seafood across most developed countries is being driven by (1) scientific research showing health benefits and (2) changing diets. At the same time, key seafood consuming countries (e.g. South East Asia (SEA), China) are experiencing growing incomes leading to increased ability to pay for (or demand) more seafood. This situation has supported prices.

Fresh seafood is a highly perishable product and the highest value products are often those sold fresh (unlike some other foods).

NZ exported seafood to 112 countries in 2012; broadly speaking Western markets accounted for about half of value and the growing Asian market the other half.

- Bulk fish for further processing a key channel for NZ
- Majority of fish consumption globally occurs in restaurants and other foodservice outlets
- Supermarkets underperform in seafood (relative to other proteins); significant sales occur in more traditional channels (e.g. fishmongers and wet markets)

Demand for sustainable varies by market. There is increasing demand for sustainable in Western markets (Europe/North America), often driven by retailers (and vocal activists). However, there is currently low/no demand in Asian and developing markets for sustainability.

SEAFOOD: WILD CAPTURE - SWOT ANALYSIS



While there are some opportunities for New Zealand wild capture going forward, there are also challenges

STRENGTHS	WEAKNESSES
 Clean water and generally healthy aquatic environment Unsubsidised industry Quota management system preventing collapse of stocks through overfishing Stocks generally at sustainable levels or rebuilding Regularly ranked highly sustainable relative to other producers Efficient, modern industry with large modern boats, in particular the deep sea freezer trawlers Stable, long-term ownership in place across most major firms 	 Most industry growth metrics negative Wild catch volume has fallen -34% since 1998 leading to reduced throughput Relatively small producer on a global scale Supply fluctuates year-to-year with availability of fish Most EEZ space low productivity deep water Bulk supply driven rather than specialised/consumer focused Firms primarily small/sub-scale with limited access to capital Highly regulated Lack of market integration, not capturing in-market value Limited in-market knowledge Lack of capital
OPPORTUNITIES	ISSUES/THREATS/RISKS
 Consumer perceptions of health benefits of seafood Over half the fish body currently going to meal and waste Use of byproducts for nutraceuticals /cosmetics sector Growing interest by some more wealthy consumers in Western markets for ecolabelling and environmental certification (driven by retailers) Growing middle class in China and SE Asia Gradual removal of global fishing subsidies Ongoing removal of trade barriers and negotiation of new free trade agreements Streamline regulations New/improved supply chain technology 	 New Zealand wild catch continues to decline going forward (for whatever reason) Other countries "catching up" on sustainability (e.g. Argentina) Low cost competitors in low wage/low regulation/higher productivity warm waters Single variable special interest groups driving domestic regulatory agenda Rising costs of airfreight reducing feasibility of fresh exports

SEAFOOD - SITUATION - AQUACULTURE



Aquaculture has huge theoretical growth potential for New Zealand, however this is unlikely to be realised in practice

New Zealand

New Zealand has huge theoretical potential in aquaculture production. New Zealand has the 10th longest coastline of any country in the world, more than China and 180 other countries on the world. Currently only a tiny fraction of this is farmed; the total area in New Zealand in aquaculture is about 6,250ha, similar to the area in onions or a single high country sheep farm.

Aquaculture is a global growth story, supplying growing seafood consumption in the place of flat wild capture. Globally aquaculture has increased its share to almost 50% of total seafood volume. In New Zealand this is just 21%.

However, this strong theoretical potential for continued growth is unlikely to be fully realised. The rule book has been regularly changed over the past 50 years and it is too early to tell whether the latest rules, not modelled on best practice (e.g. Norway), will in fact make things easier. However, it is illustrative that the fourth largest identified investment in the New Zealand seafood industry in the past two years has been the \$10m NZKS spent on paperwork and applications (!).

The fundamental issue is that NZ as a society has yet to come to a consensus on aquaculture, particularly salmon, with the proponents arguing for it to become a billion dollar industry, while a wide ranging opposition of recreational fisherman, inshore fishing companies, holiday home owners and environmental advocates oppose its growth. There is also historic uncertainty around foreshore and seabed ownership.

New Zealand farms three species in any quantity (mussels, salmon and oysters); these make up ~99% of the total exports.

Aquaculture is more consolidated than wild catch; the top 5 companies account for approximately 75% of the industry

Competitors - Shellfish

On a global basis, most shellfish are produced and consumed locally and very little crosses borders.

12% of global mussel production crosses borders; New Zealand competes with a wide range of regional players by market; Chile is an emerging multi-regional threat.

1% of global oyster production crosses borders; global production is flat except for China which is increasing production massively.

Competitors - Salmon

Salmon aquaculture is highly consolidated globally. The top 3 firms account for 38% of global production (the top 10 63%). None of the top 25 global salmon producers currently operate in NZ.

Consolidation is driven by clear economies of scale in production systems, marketing, processing, skills, genetics and capital. Effectively all¹ other salmon aquaculture in the world farm Atlantic salmon due to its faster growth rates.

New Zealand biosecurity prevents imports of fresh salmon.

Consumers/Markets

As per wild capture plus

A handful of markets account for the majority of NZ aquaculture exports: Australia, Japan and the USA (plus S. Korea, Hong Kong & Spain).

High levels of biosecurity in Australia (Salmon, Mussels & Oysters) and Japan (Mussels) benefit NZ firms (e.g. NZ the <u>only</u> supplier of imported whole salmon to Australia).

SEAFOOD: AQUACULTURE - SWOT ANALYSIS



Aquaculture faces both opportunities and threats

STRENGTHS	WEAKNESSES
 Clean water and generally healthy aquatic environment Unsubsidised industry Strong food safety regulations Predictable supply Concentrated resources in three key species Only country farming green lipped mussels (Perna canaliculus); other farm other green shelled (perna viridis, etc.) or blue mussels (MYTILUS SP.) Limited presence of disease Unique access to some biosecure markets (particularly Australia & Japan) Parts of domestic industry protected from imports by biosecurity measures 	 Small producer of mussels on a global scale; very small producer of other two species (salmon and oysters) Mussels and oysters have low value per hectare; salmon development limited by regulatory challenges (change in use and landuse consent difficult) Reliance on biosecure markets and a handful of flat to declining others (e.g. USA) Constrained regulatory environment which is semi-constantly changing Relatively low government support for fledgling industry (e.g. vs. Norway loan guarantees in early days of salmon industry development) Competing users of coastal space No competitive advantage around feed production due to low scale Disconnect between scientific research into new species and needs of industry; research appears to primarily research native species Illegal to farm high potential/high return trout
OPPORTUNITIES	ISSUES/THREATS/RISKS
 Consumer perceptions of health benefits of seafood Growing middle class in China and SE Asia On-going removal of trade barriers and free trade agreements Preferential access to Australia due to access through phyto-sanitary barriers New species Development of land based plants for use in aquaculture (e.g. soy) Industry co-operation 	 Low cost competitors in low wage/low regulation higher productivity warm waters Chile China (future) Beach, bach and boat (the 3 b's), NIMBY (not in my back yard) attitudes limiting industry activity Disease outbreaks (e.g. oysters recently) Reliance on a small number (3) of species (risk if disease outbreak); no significant new species has emerged since 1976 Single variable special interest groups driving domestic regulatory agenda

SEAFOOD - POTENTIAL AREAS FOR INVESTMENT



Limited opportunities for new external investment in wild capture; however regulatory change and fundamental drivers may result in opportunities in aquaculture

Wildcatch

There are limited entry vehicles into wild catch, with ownership locked up by:

- Maori interests (unlikely to sell),
- Cornerstone shareholdings by large international companies (Nissui and RH Group)
- Cornerstone shareholding of publicly listed Sanford,
- Many family businesses: Talleys, United, Independent, Solander, Vela, Amalgamated unlikely to sell without generational change.

The industry has limited growth potential, particularly no significant volume growth is likely in wild catch. The strong and effective sustainability management system means catch will be flat-to-down in the foreseeable future. However this system also implies that New Zealand will have relatively more fish in the future compared with overfished countries and regions. Also, unlike the situation 20-30 years ago, there are now no new species to discover and market.

Main source of value creation in wild capture is in cost reductions via consolidation. This consolidation is on-going, but progress is slow due to the ownership issues discussed above. There are opportunities in value creation through delivering a greater percent of the catch to the market in a more fresh/less damaged form (see PGP*).

Aquaculture

Pacific oysters have low/no growth potential, due to the viral breakout and global market structure/situation.

Mussel industry is mature and consolidating rapidly. Mussels are relatively low value use of space. Returns over the past few years have been mixed-to-poor, particularly for smaller operators (driving industry consolidation).

The Government/Industry mussel breeding program will likely deliver constant incremental gains for the foreseeable future. However these are likely to maintain New Zealand's relative competitiveness (e.g. vs. Chile) rather than translate into dramatically increased profitability.

Theoretically New Zealand has huge potential in salmon aquaculture; in practice regulations and competing interests will likely constrain success.

New Species

The species with the strongest potential (trout) is unfortunately illegal to farm. While New Zealand scientists are working on a wide range of new species these are all highly speculative and unproven commercially. Only investors with transferable capabilities or strong appetite for risk should participate.

Further Processing

There are opportunities for investment in further processing of New Zealand bulk ingredients (e.g. "white fish") into consumer ready products, however this is primarily a greenfields opportunity for firms with transferrable skills.

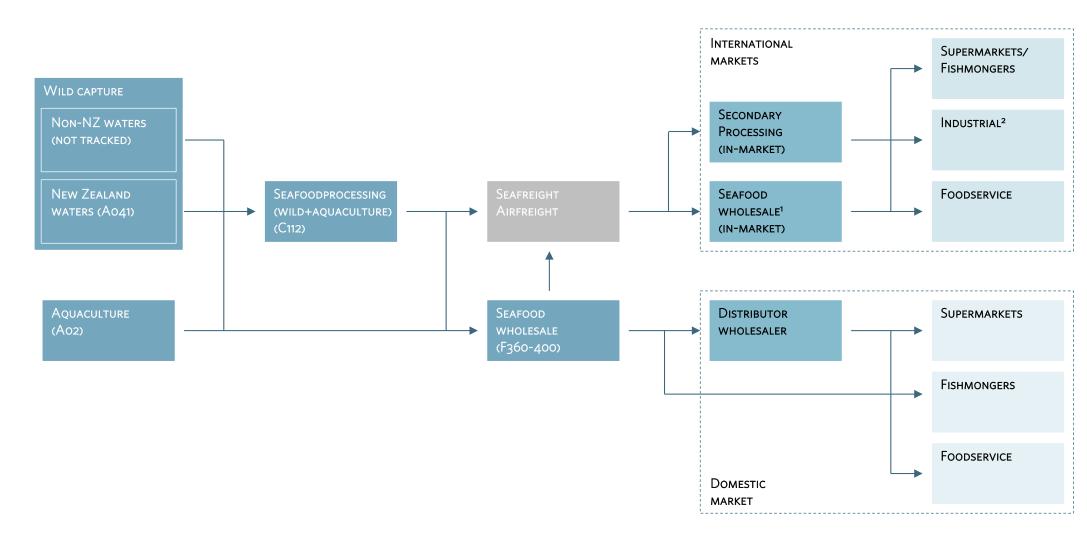
There are clear opportunities for investment in seafood derived nutraceuticals (discussed in the related nutraceuticals document).



New Zealand seafood has a relatively straight forward supply chain, driven in part by the perishable nature of the product in many cases

SIMPLIFIED MODEL OF NEW ZEALAND SEAFOOD SUPPLY CHAIN

(model; ANZSIC codes as available))



^{1.} There may be one or more layers of wholesaling, depending on product or market; some wholesale functions maybe captive inside retailers or foodservice operators; 2. Includes product for housebrands, canners, fish meal manufacturers, Source: Coriolis



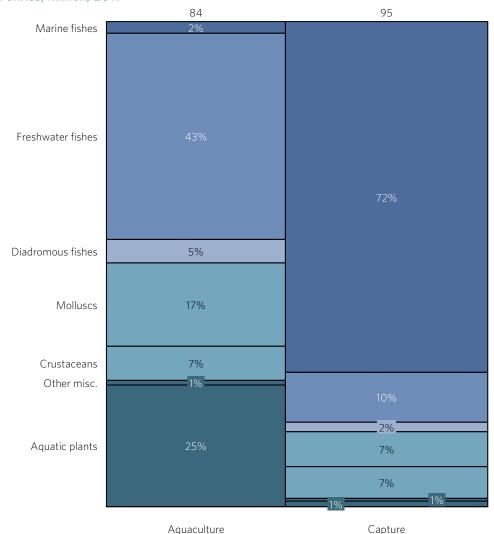
GLOBAL SEAFOOD BY TYPE

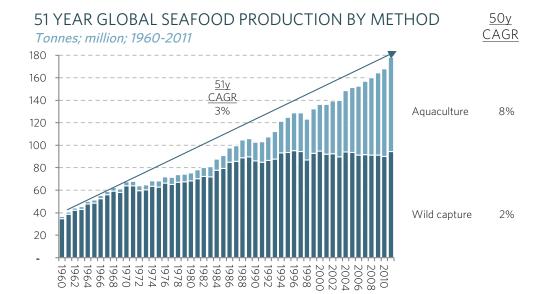


Global seafood production roughly half wild capture, half aquaculture; aquaculture driving production growth leading to increasing global per capita consumption; marine fish dominate capture; aquaculture more varied

GLOBAL FISH/SEAFOOD PRODUCTION BY TYPE & METHOD

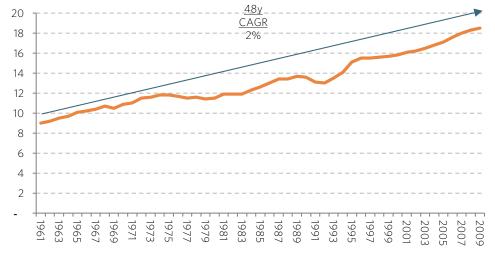






48 YEAR GLOBAL FISH/SEAFOOD CONSUMPTION PER CAPITA

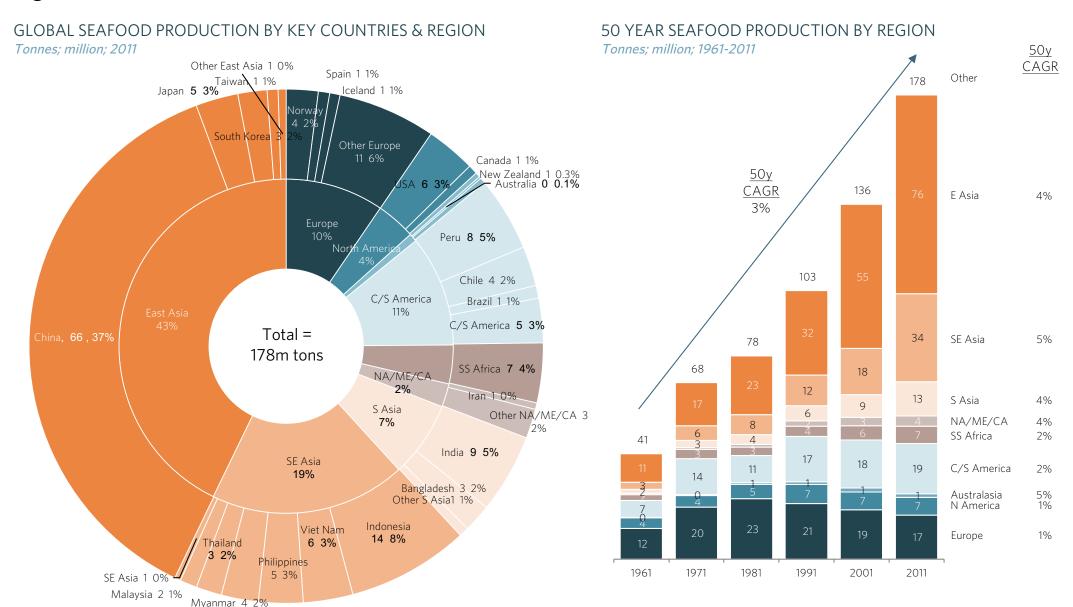
Kilograms/person; 1961-2009



GLOBAL FISH/SEAFOOD PRODUCTION BY REGION



New Zealand produces 0.3% of global seafood production; global production growth being driven by Asian region



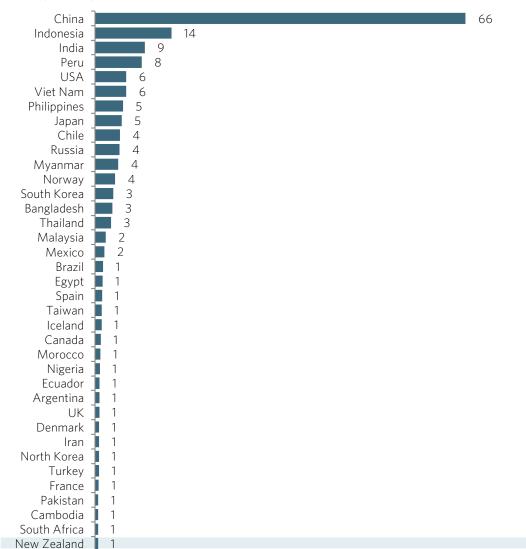
TOP 37 SEAFOOD PRODUCING COUNTRIES



New Zealand is the 37th largest seafood producing country in the world

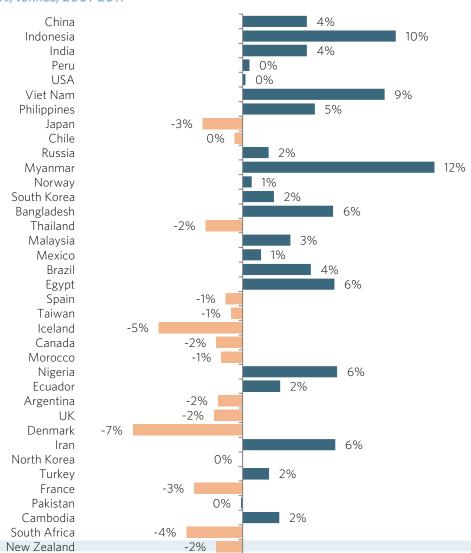
TOP 37 PRODUCERS OF SEAFOOD FROM ALL SPECIES

Tonnes; million; 2011



10 YEAR PRODUCTION GROWTH RATE CAGR

%; tonnes; 2001-2011

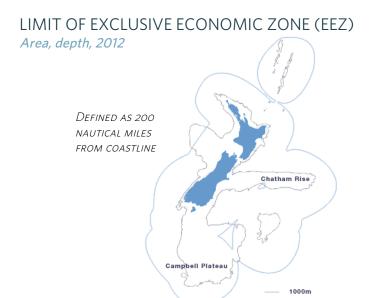




KEY PRODUCTION METRICS

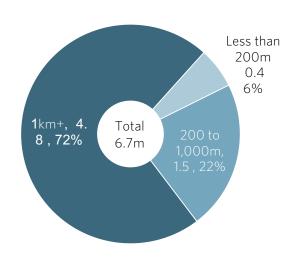


New Zealand has the 10th largest coastline of any country and 6.7m km² of controlled ocean space - the sixth largest claimed ocean space of any country - however most of this is deep water with low productivity

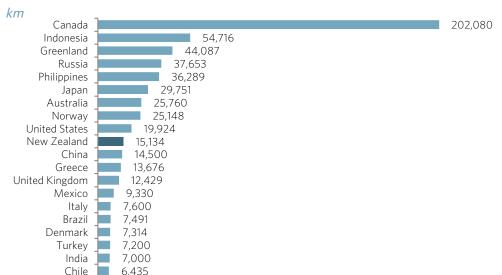


AREA OF EEZ BY WATER DEPTH

km²; % of area; 2012



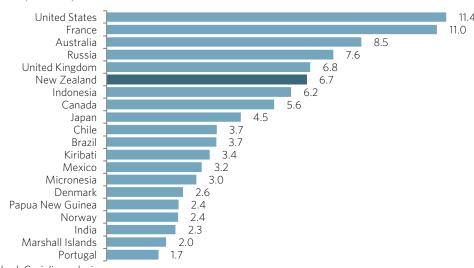
LENGTH OF COAST BY TOP 20 COUNTRIES



200 Mile Zone

TOP 20 EXCLUSIVE ZONES (EEZ) BY CLAIMED AREA

km²; million; 2012 or most recent available

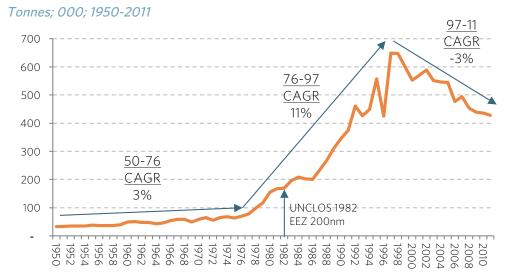


KEY PRODUCTION METRICS

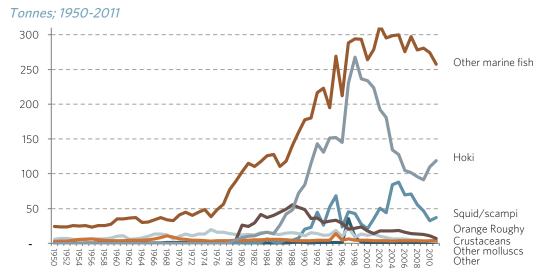


New Zealand wild capture has been trending downward since the late 90's, while aquaculture has been growing since the early 80's

TOTAL WILD CAPTURE SEAFOOD PRODUCTION



TOTAL WILD CAPTURE BY SPECIES GROUP

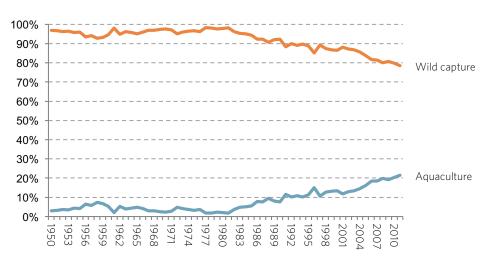


TOTAL AQUACULTURE PRODUCTION BY KEY SPECIES



SHARE OF TOTAL SEAFOOD PRODUCTION VOLUME BY TYPE

% of tonnes; 1950-2011

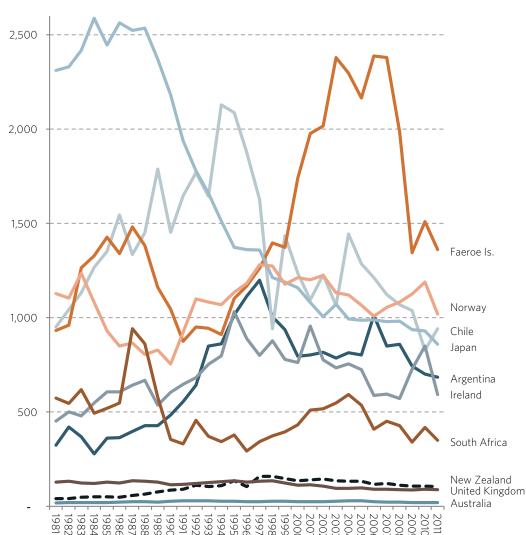




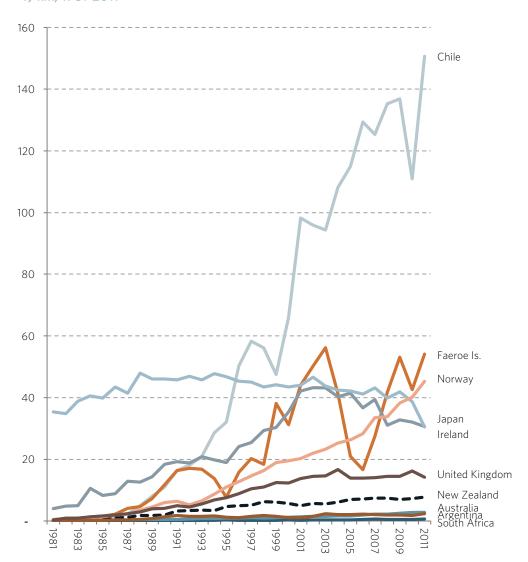
New Zealand achieves low production yields in wild capture and aquaculture relative to peers

WILD CAPTURE VOLUME PER KM^2 OF EEZ

Kg/km²; 1981-2011



AQUACULTURE PRODUCTION VOLUME PER KM OF COASTLINE *T/km*; 1981-2011







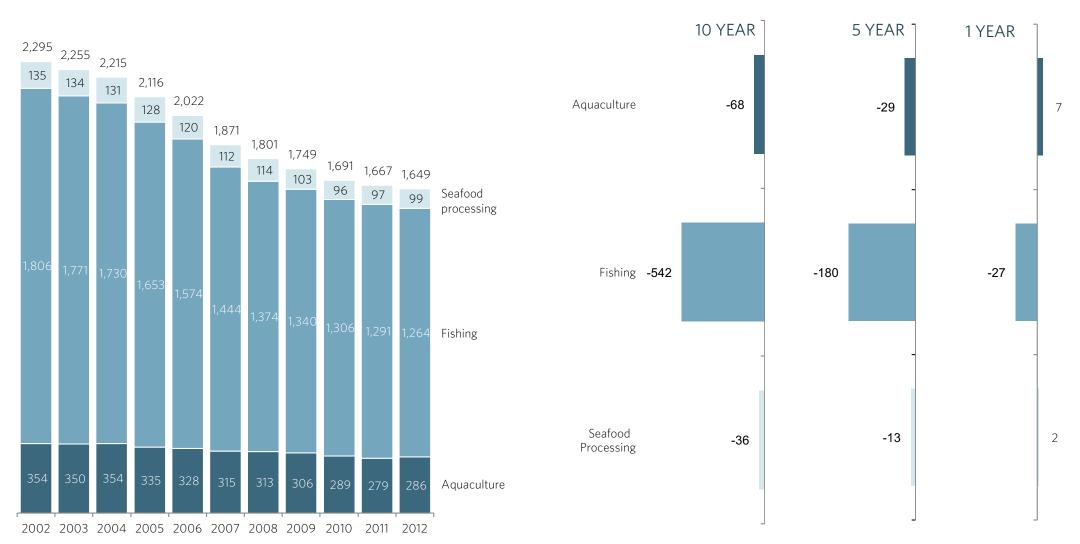
The number of seafood processing firms continues to decline as the industry consolidates

NUMBER OF SEAFOOD PROCESSING ENTERPRISES¹

Enterprises; 2002-2012

CHANGE IN NUMBER OF SEAFOOD PROCESSING ENTERPRISES

CAGR; absolute change; periods as given



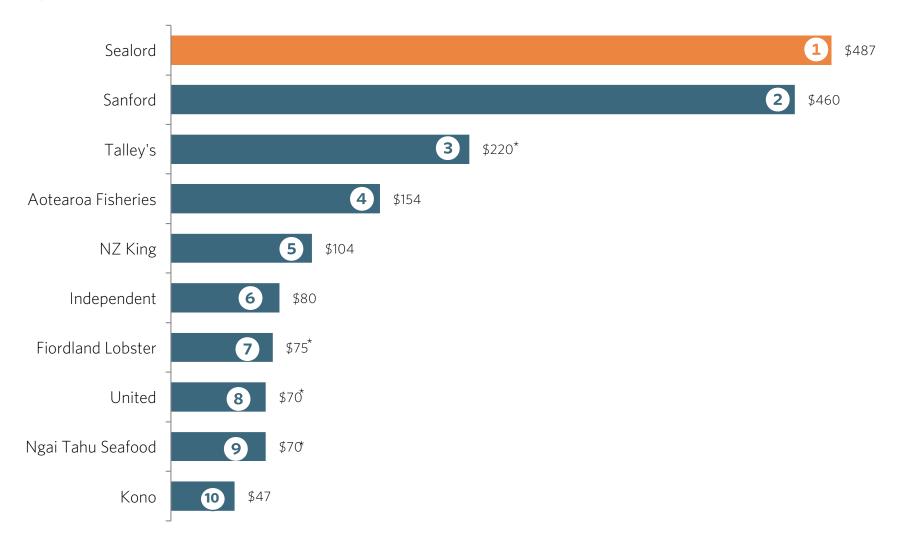
IFAB TOP TEN SEAFOOD FIRM TURNOVER FY12



Sealord continues as the largest seafood firm in New Zealand by turnover in FY12

ANNUAL TURNOVER BY TOP 10 SEAFOOD FIRMS

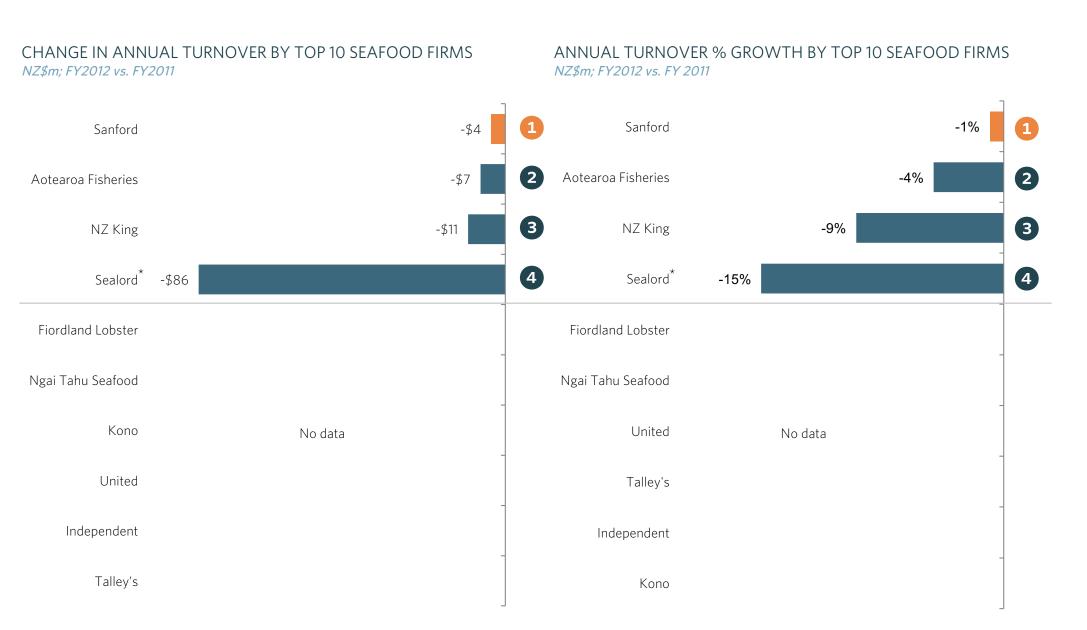
NZ\$m; FY2012



IFAB TOP TEN SEAFOOD TURNOVER GROWTH FY12



According to available actuals, FY12 was a difficult year



^{*} Sealord is not a comparable 12 month period, FY11 is a 15 month period vs FY12 a 12 month period, Source: various company annual reports; NZCO; Coriolis estimates and analysis

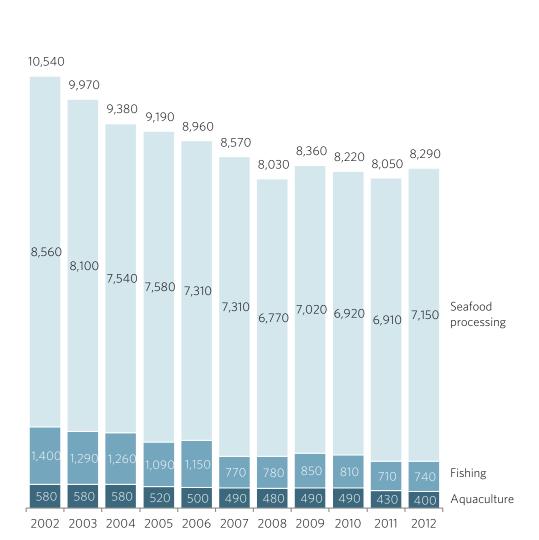
KEY PRODUCTION METRICS



Industry employment was up in 2012 and historic decline appears to have stabilised over the past five years

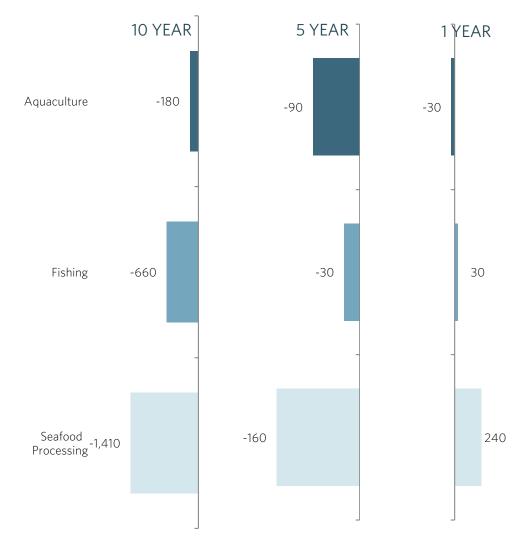
TOTAL EMPLOYMENT BY SEAFOOD ENTERPRISES

Headcount; as of Feb; 2002-2012



CHANGE IN SEAFOOD EMPLOYMENT

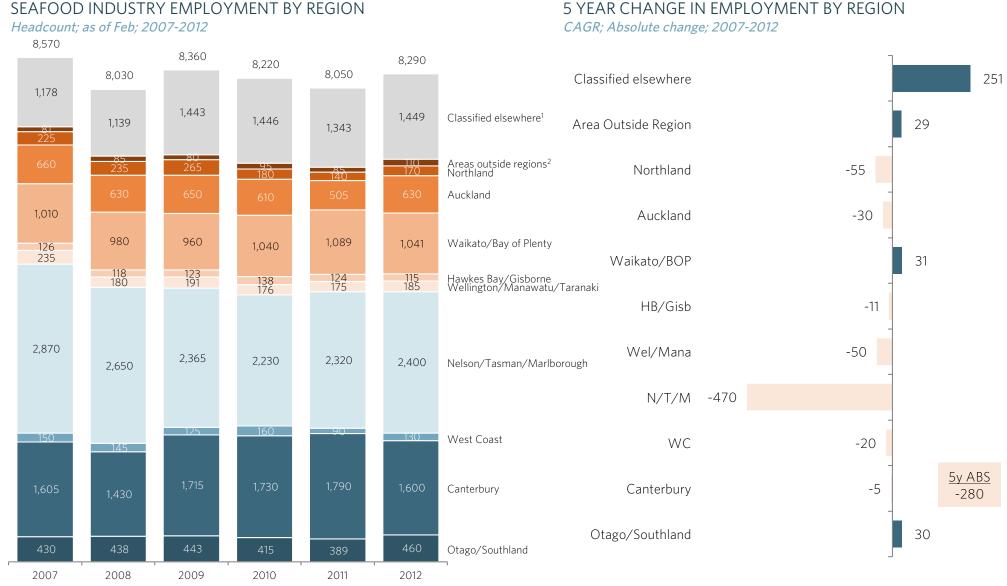
CAGR; Absolute change; periods as given



EMPLOYMENT BY REGION



Employment down across most regions over the past five years



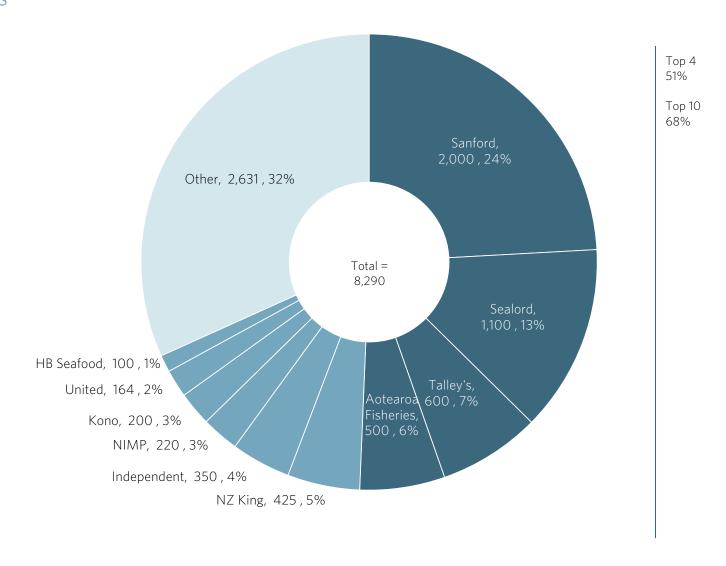
^{1.} Data is geographic level; classified elsewhere would include non-seafood catch & processing activities (e.g. wholesaling; other food processing; retail; foodservice); 2. for example on a boat at sea; Source: Statistics NZ business demographics database; Coriolis analysis



The seafood industry is relatively consolidated with the top four firms accounting for over half of employment and the top ten for almost three quarters

SEAFOOD INDUSTRY EMPLOYMENT BY KEY FIRM

Headcount; 2012, 2013



IFAB TOP TEN NEW SEAFOOD INVESTMENT



Only three investments over \$10m were identified in the New Zealand seafood industry; two were partially government funded; the fourth largest investment was in a resource consent process

IDENTIFIED MAJOR INVESTMENTS IN NEW PLANT/EQUIPMENT

Rank	Announced	Investment	Firm	FACILITY	Location	OPENED/PLANNED
1	n/a	\$52m	Sanford Government Others	Mussel hatchery and breeding programme investment part industry part government	Multiple locations	n/a
2	n/a	\$52m	Aotearoa, Sealord, Sanford, Government	6 year joint project for Precision Seafood Harvest (with P&F Research)	-	Oct 2013
3	n/a	~\$23m	NIMPL	Automated mussel opening machinery installed at NIMPL Mussel and Sanford Marlborough processing facility	Tauranga/Marlborough	June 2010
4	2007	\$10m (consent process)	NZ King Salmon	Application for 8 new farms, 4 approved; enable additional 15,000 tonnes over 6ha and increase revenue by \$185m, adding 200 jobs	Marlborough Sounds	n/a
5	2012	\$7-8m	Fiordland Lobster Co.	Recent expansion into Australia	Australia	2013
6	August 2013	\$6m	MIT Seadragon	Fish Oil plant expansion	n/a	n/a
7	2012	\$6m	Mt Cook Alpine Salmon	New salmon processing plant plus smokehouse (existing operation in Indon.) Part of \$20m expansion plans – canal salmon	Washdyke, Timaru, South Canterbury	Nov 2013
8		\$5.4m	NIMP	New production line at the \$23m plant	Tauranga BOP	2013
9	2013	-	Aotearoa Fisheries	New Prepared Foods facility in Palmerston North	Palmerston North	2014
10	2011	\$1.6m	United Fisheries	Developed new fertiliser and silage product from fish byproduct (BioMarinus)	Christchurch	2013

OTHER NEW SEAFOOD INVESTMENT



A handful of other smaller investments were identified

IDENTIFIED MAJOR INVESTMENTS IN NEW PLANT/EQUIPMENT

Announced	Investment	Firm	FACILITY	Location	OPENED/PLANNED
2013	\$1.5m	Sealord	New fresh/chilled fish line - aim to increase fresh from negligible to 10%	Vickerman Street facility Nelson	June 2013
2009	~\$1.3m	Prime Foods	New plant in Philippines with co-investors Alliance Tuna International	Philippines	Nov 2009
2010	\$2.1m loan	Big Glory Bay Salmon & Seafood Company	New salmon plant in Philippines; JV between Prime Foods and Alliance Select Foods (www.bigglorybay.com)	Philippines	August 2011
2013	\$750k	Sealord	new acoustic optical system to understand fisheries		May 2013
June 2013	-	Talleys	Extension of 3 mussel farms	Pelorus Sounds	n/a
2013	-	Cloudy Bay Clams	Investment in plant and equipment	Marlborough	n/a

IFAB TOP NINE SEAFOOD ACQUISITIONS



A number of seafood businesses were acquired recently, most driving industry consolidation

IDENTIFIED MAJOR ACQUISITIONS INVOLVING NEW ZEALAND SEAFOOD FIRMS

Rank	Acquirer	Target	Price	DATE	Details
1	Sanford	Pacifica Seafood (mussel and oyster aquaculture operations) from Skeggs Group	\$85m	Nov 2010	 Acquisition of #2 mussel producer by #1 mussel producer (industry consolidation) Ownership of 70+ marine farms, 400 ha of water space and 800 mussel longlines + lease, share and contract farming including a further 130 hectares of space and 300 mussel longlines
2 Est	Sanford/Sealord	North Island Mussel Processors (Greenshell NZ/Sanford/Sealord)	n/a	2012	 Bought from receivers- bad debt from Greenshell NZ Includes Coromandel mussel farming operation and Tauranga plant Tolling factory
3 Est	Aotearoa Fisheries Sealord Te Ohu Kaimoana	Anton's Seafoods	n/a	Sept 2013	- Aotearoa Fisheries to purchase Anton's factory in Auckland and Aotearoa, Sealord, and Te Ohu Kaimoana to share the quota
4 Est	Anton's Seafoods	50% of Seafood Proprieties and Seafood Processors	n/a	2012	- Aotearoa Fisheries 50% holdings
5 Est	Aotearoa Fisheries	Sanford oyster farms	n/a	July 2012	 Purchase all Sanford's Pacific oyster farms in Northland 16 farms over 128ha Makes Aoteraoa #1 oyster operator in NZ
6 Est	Sealord	Partners with Tainui Group Holdings	n/a		- Sealord to co-manage its deep-sea fishing quota & <u>Aotearoa Fisheries</u> <u>Limited</u> in respect of our in-shore quota
7	Alliance Select Foods Intl. (Phil.)	Akaroa Salmon	NZ\$2.8m	Oct 2012	- Purchased 80% of Akaroa Salmon
8	NZKS	Skeggs Groups – Pacifica Salmon Ltd	\$950k	Jan 2012	Sold salmon interest to NZKS to focus on tourismHatchery and 2 salmon farms
9	PauaCo	Pacific Canneries asets + KABCO, ABCO	n/a	2012	 Formed new entity PauaCo, acquired assets of Pacific Canneries Itd and absorbed activity and shares of KABCO and ABCO, resulting in ~30% of commercial paua catch

FOREIGN INVESTORS



New Zealand seafood companies have attracted limited foreign investment

FOREIGN INVESTMENT IN NEW ZEALAND SEAFOOD FIRMS

Date	Investor	Origin	Investment	INVESTOR DESCRIPTION
2001	Nissui	Japan	50% of Sealord	Nippon Suisan Kaisha Ltd founded in 1911 has 10,000 employees and capital value of \$23,729m yen
1996 /2009	Evergreen Holdings / Rimbunan Hijau	Malaysia	51% of NZ King Salmon	Oregon Group (Singapore) sold share of NZ King Salmon to Evergreen Holdings also part of the same Tiong Group (one of the wealthiest families in Malaysia's)
2003	Kingfisher Holdings (Thailand) owned by Maruah Corp (Jp)	Japan	Kingfisher Products Ltd	Worlds largest fishing company with sales of NZ\$15b
2009	Alliance Select Foods Intl. (Phil.)	Philippines	50% of Prime Foods NZ	Publicly listed Philippines-based tuna canner with 2 factories (General Santos City, Philippines and Bitung, North Sulawesi,
2012	Alliance Select Foods Intl. (Phil.)	Philippines	80% of Akaroa Salmon	Indonesia); produces fishmeal; smoked salmon JV with Studholm



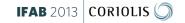
A number of major closures/sales were identified

IDENTIFIED MAJOR CLOSURES/SALES INVOLVING NEW ZEALAND SEAFOOD FIRMS

Action	Company	Date	Details
Liquidation	Chatham Island Seafoods 2009 Ltd	Oct 2013	A factory, two vessels and quota Currently in Liquidation
Plant closure	Independent Fisheries	Oct 2013	Statement considering proposal for closing plant in CHCH due to sharp decrease in sales; 200 employees
Market exit	Sealord sells Yuken and exits Argentina	Aug 2013	Sealord sells Yuken (its Argentinian firm) after constant losses
Business activity exit	Sealord - aquaculture	July 2013	Announces plans to exit all aquaculture business in next three years
Receivership	North Island Mussel Processors; Greenshell NZ	2012	Sanford and Sealord by out Greenshell NZ after put in receivership 7-800T, 3 vessels
Plant closure	Sanford -factory	December 2011	Closes Kaeo oyster processing plant Badly affected by mortalities caused by OSHV-1
Business activity exit	Skeggs Group	2010	Exits all aquaculture to focus on tourism



TOP 10 SEAFOOD FIRM PROFILES











SANFORD









AOTEAROA FISHERIES





Graham Stuart Chief Executive Officer

Ellerslie, Auckland

PHONE: +64 9 579 1659

YFAR FORMFD: 1974

~\$509

WEBSITE: www.sealord.com/nz

DESCRIPTION: Vertically integrated seafood fishing

and marketing company exporting to over 60

KEY PRODUCTS: Frozen and chilled fish, oysters,

mussels and other prepared seafood products

COMPANY NUMBER: 168963 / 1097137

STAFF EMPLOYED: 1,100 (+400 offshore)

Precision Harvesting project to target fish

REVENUE: \$487.1 (FY12) \$573.5 (FY11, 15mths)

COMPANY HIGHLIGHTS: New brand campaign;

exits all of Argentinian fishing business Yuken; part of

OWNERSHIP: Kura Limited 100% NZ: Aotearoa

Fisheries 50%, Japan: Nippon Suisan Kaisha 50%

ADDRESS: Level 3, Building 8 666 Central Park,

countries, significant global investments

Volker Kuntzsch Chief Executive Officer

mussels, salmon

DESCRIPTION: Wild capture and aquaculture harvesting, farming, processing and marketing; 9 plants and 11 vessels that freeze and pack

KEY PRODUCTS: Chilled and frozen fish, squid,

OWNERSHIP: NZ; public (NZX: SAN) (37% Amalgamated Marketing/Goodfellow Family)

COMPANY NUMBER: 40963

ADDRESS: 22 Jellicoe Street, Freemans Bay Auckland

PHONE: +64 9 379 4720 WEBSITE: www.sanford.co.nz/

YEAR FORMED: 1881/1904

STAFF EMPLOYED: 2,000

REVENUE: \$460m (FY12)

COMPANY HIGHLIGHTS: Eric Barratt retiring as CEO after 15 years; NZ business both deepwater and inshore shown improved performance; Australian business underperforming; reduced debt significantly; Fined US\$1.9m in 2012; part of Precision Harvesting project to target fish

Michael & Peter Talley Joint Managing Directors

TALLEY'S GROUP

DESCRIPTION: Deepsea and inland fishing and shellfish company, processing out of 4 processing factories and a fleet of fishing vessels

KEY PRODUCTS: Frozen and chilled fish, shellfish (cockles, oysters and scallops), byproducts

OWNERSHIP: NZ; private (Talley family) JV with Amaltal Fishing Co

COMPANY NUMBER: 168346 ADDRESS: Port Motueka, Motueka, South Island

PHONE: +64 3 3 528 2800

WEBSITE: www.talleys.co.nz

YEAR FORMED: 1936/1973 STAFF EMPLOYED: 600* (seafood)

Total group = \$1,640*

REVENUE: \$220m* (seafood only; ex-meat/dairy);

COMPANY HIGHLIGHTS: Marlborough District Council approved +16ha expansion of three mussel farms in Pelorus Sounds (Sep 2013)

Carl Carrington Chief Executive Officer

DESCRIPTION: Pan iwi organisation with 50% ownership in Sealord, and full ownership of Moana Fisheries, OPC Fish, Prepared Foods, Pacific Marine Farms & Kia Ora Seafood.

KEY PRODUCTS: Fresh and frozen Fish, ovsters. mussels, + prepared seafood products

OWNERSHIP: NZ; tribal (various iwi/tribal holdings); ownership of Moana Pacific, Pacific Marine Farms, Kia ora Seafoods, OPC

COMPANY NUMBER: 1581332

ADDRESS: Level 3. Moana Pacific House 138 Halsey Street, Auckland

PHONE: +64 9 302 1520

WEBSITE: www.afl.maori.nz

YFAR FORMED: 2004

STAFF EMPLOYED: 500 (incl 250 Prepared Foods)

REVENUE: \$154.1 (FY12)

COMPANY HIGHLIGHTS: New Prepared Foods facility near completion; Agreement with Cawthron Institute to take over Pacific oyster nursery; Restructuring business; sold share in Seafood Processors; ; part of Precision Harvesting project to target fish; overall profit of \$17m

^{*} Estimates; Source: annual reports, company websites, company data, NZ Companies Office, interviews, Coriolis estimates

TOP 10 SEAFOOD FIRM PROFILES





NEW ZEALAND KING SALMON CO







INDEPENDENT FISHERIES





FIORDLAND LOBSTER CO



David Hogg

Chairman



UNITED FISHERIES



Andre Kotzikas

Chief Executive/Owner

oysters, fish fertilisers

Grant Rosewarne Chief Executive Officer

DESCRIPTION: Vertically integrated King salmon
farming, processing and marketing company; 70% of
NZ salmon production



CHARLES SHADBOLT Managing Director

DESCRIPTION: Deep see fishing company (3	
vessels), supplier of whole & dressed fish and squi	d

DESCRIPTION: #1 Lobster company in NZ operating out of Fiordland

DESCRIPTION: Seafood fishing, processing and marketing company based in Christchurch

KEY PRODUCTS: Fresh, frozen, smoked King salmon

southern blue whiting, mackerel, barracouta) and arrow squid

OWNERSHIP: NZ; private (Shadbolt; others)

KEY PRODUCTS: Whole & dressed fish (hoki.

OWNERSHIP: NZ; mixed (Hutchins/Wilson 25%; iwi: other)

OWNERSHIP: NZ; private (Keys, Jones & Kotzikas

KEY PRODUCTS: Frozen and fresh fish, mussels.

family)

(Malaysia), 42% Direct Capital

ADDRESS: 93 Beatty Street, Annesbrook, Nelson

OWNERSHIP: Foreign 51% Evergreen Holdings

ADDRESS: Shadbolt Boulevard, Woolston Christchurch

COMPANY NUMBER: 407182 ADDRESS: 17 Caswell Rd, Te Anau 9600

KEY PRODUCTS: Live Lobster

ADDRESS: 50-58 Parkhouse Road, Christchurch

PHONE: +64 3 3 548 5714

WEBSITE: www.kingsalmon.co.nz

COMPANY NUMBER: 287485

PHONE: +64 3 384 2344 WEBSITE: www.indfish.co.nz

COMPANY NUMBER: 125989

WEBSITE: www.lobster.co.nz

PHONE: +64 3 249 9760

WEBSITE: www.unitedfisheries.co.nz

COMPANY NUMBER: 126455

YEAR FORMED: 1985

YEAR FORMED: 1959

YEAR FORMED: 1989 STAFF EMPLOYED: 30

YEAR FORMED: 1974 STAFF EMPLOYED: 164

PHONE: +64 3 343 0587

STAFF EMPLOYED: 425 REVENUE: \$104.0m (FY12) STAFF EMPLOYED: 350 FT REVENUE: \$80m (FY12)

REVENUE: \$75m* (FY12) 101.5m (FY13) REVENUE: \$70m*

COMPANY HIGHLIGHTS: Recent application for 8 new farms in Marlborough Sounds, 4 approved

COMPANY HIGHLIGHTS: Two fishing vessels now under NZ flag, including new vessel MV Irvinga which started fishing in 2013; Christchurch further processing factory under pressure

COMPANY HIGHLIGHTS: Invested \$7-8m in Australia

COMPANY HIGHLIGHTS: Developed a fish silage for feeding livestock and a fertiliser

^{*} Estimates; Source: annual reports, company websites, company data, NZ Companies Office, interviews, Coriolis estimates

TOP 10 SEAFOOD FIRM PROFILES









KONO NZ

Don Everitt



Chief Executive Officer



Brian MoriartyChief Executive Officer

DESCRIPTION: Vertically integrated seafood company over 3 locations throughout NZ; factories in Kaikoura and Bluff

DESCRIPTION: Kono Seafood (was Aotearoa Seafood)

KEY PRODUCTS: Tahu brand, lobster, paua, cod, oysters, mussels

OWNERSHIP: NZ; tribal (Ngai Tahu Charitable Trust)

KEY PRODUCTS: Mussels (150ha), oysters, lobster; factory in Blenheim

OWNERSHIP: Private/Iwi (Wakatu Incorporation)

COMPANY NUMBER: 386544

COMPANY NUMBER: 3438072

ADDRESS: 6 Bolt Place, Christchurch

ADDRESS: Level 2, Wakatū House Montgomery Square, Nelson

PHONE: +64 3 358 2761

PHONE: +64 3 578 2069

WEBSITE: www.ngaitahuseafood.com

WEBSITE: wakatu.org.nz

YEAR FORMED: 1989

YEAR FORMED: 1977

STAFF EMPLOYED: 35

STAFF EMPLOYED: 250 (~400 Wakatu total)

REVENUE: \$70-75m* Group \$209m (FY12)

REVENUE: \$47m (Wakatu total \$250m incl

property)

COMPANY HIGHLIGHTS: \$17.5m EBIT in 2013 from Seafood division; strength of lobster to China, recent acquisitions of a number of Sealord and other marine farms

COMPANY HIGHLIGHTS:

^{*} Estimates; Source: annual reports, company websites, company data, NZ Companies Office, interviews, Coriolis estimates

OTHER SEAFOOD FIRM PROFILES



	Company	MD/CEO	Business description	Ownership Company #	Formed	Revenue	Staff	Address	Website
GREENSHELL NEW ZEALAND	Greenshell NZ Ltd	Peter Vitasovich General Manager	Greenlipped mussels "Ikana"	1969751 NZ; Private: (Vitasovich)	1990/ 2007	\$20- 30m*	240	725 Rosebank Rd Avondale Auckland 64 9 828 1650	www.greenshellnewzealand.com www.ikana.com Currently in receivership
NorthIsland Mussels Ltd	North Island Mussels	Steve Wells Chief Executive	Mussel production and sales 6,000 pottles /day	3995838 NZ; Private JV Sanford & Sealord	2012	\$20- 30m*	FT 20 PT 200	25 Glenlyon Ave, Greerton 3112, Tauranga	www.nimpl.co.nz Original NIMPL into receivership 2012
SEAFOON'S	Hawkes Bay Seafoods	Marcus D'esposito General Manager	Vertically integrated seafood company in Hawkes Bay	861866 NZ; Private (D'Esposito)	1997	\$40- 50m*	100	Cnr Pandora Road & Ahuriri Quay, Napier 64 6 835 5533	www.hawkesbayseafoods.co.nz
PRIME	Prime Foods NZ	Henry Studholme Managing Director	Prime Smoked salmon (purchased from Sanford)	625998 50% Philip Alliance Select Foods Intl. 50% NZ Studholme	1993	\$7.0m	50	Hororata, RD2 Darfield, Canterbury 64 3 318 0895	www.primefoodsnz.co.nz www.bigglorybay.com Prime Smoke brand Manufactures in Philippines
SAG HST SUPPLY LID.	Star Fish Supply Ltd	Andy Claudatos Director	Inland and deepsea fish processors, wholesalers and exporters	926592 / 162271 NZ; Private (Claudatos)	1964	\$30- 40m*	50	27 Dunlop Road, Onekawa, Napier 64 6 843 0664	www.starfoods.co.nz/
MT COOK ALPINE SALMON	Mt Cook Alpine Salmon	Geoff Matthews Chief Executive	Salmon farmers and processors, + smokehouse 600T	2225082 NZ; Private (Various)	1992	\$2- 10m*	40	1 Tekapo Dve Twizel 64 3 435 0085	www.mtcookalpinesalmon.com
STAND PARTY	Nelson Ranger Fishing	Simon Acton-Adams Managing Director	Mussel farming & processing; wild capture	874380 NZ; Private	1948	\$30- 40m*	40	43 Dublin Street Picton, Blenheim 7220 64 3 573 7921	www.nrfc.co.nz
WESTFLEET SEAFOOOS LTD	Westfleet Seafoods	Craig Boote Managing Director	Wild capture 6 vessels; 1 factory	50% Sealord; 50% Endurance (Craig Boote)	1981	\$30- 40m*	40	6-8 Gilbert Street Greymouth 64 3 768 5370	www.westfleet.co.nz
OYSTERS	Pakihi Marine Farm	Callum McCallum Director	Oysters	113952 NZ; Private (McCallum)	1982	\$2-5m*	40	914 Clevedon-Kawakawa Bay Road, RD 5 Papakura 2110	www.clevedonoysters.co.nz
VELA FISHING LTD	Vela Fishing	Philip Vela Director	Seafood business, exporting frozen fish and mussels	923611 NZ; Private (Vela; others)	1929	\$30- 40m*	35	12 Sir Tristram Avenue Te Rapa Hamilton 64 7 849 2376	www.velafishing.co.nz

^{*} Estimate based on number of employees and type of business activity; Source: annual reports, company websites, company data, NZ Companies Office, interviews, Kompass, Coriolis estimates

OTHER SEAFOOD FIRM PROFILES



	Company	MD/CEO	Business description	Ownership Company #	Formed	Revenue	Staff	Address	Website
Southern Clams Limite	_a Southern Clams	Roger Belton Managing Director	Clams	209636 NZ; Private (Belton; others)	1984	\$5- 10m*	30	16 Bombay Street Dunedin 9016 64 3 477 1505	www.nzclams.com
Ngati Porou Seafoods Group	Ngati Porou Seafoods Group	Mark Ngata General Manager	Vertically integrated seafood business, contract fishing, selling crayfish, mussels and fish	1778412 Tribal: Te Runanga O Ngati Porou	2002	\$4.6m	25	47-53 The Esplanade, Gisborne 64 6 868 1644	www.npsl.co.nz
LEIGH FISHERIE	Leigh Fisheries / Lee Fish Group	Gregory Spencer Bishop General Manager	Vertically integrated seafood company (NZ and SEA); fish and lobster; contract fishers	56407 NZ; Private (Dermot Cunningham)	1958	\$25- 35m*	25	10 Pakari Rd, Leigh, Warkworth, Auckland 64 9 422 6424	www.leefish.com 1 factory
WELLINGTES TRAVELING SOMPARY	Wellington Trawling Co 2008	Tony Basile Managing Director	Seafood processor, retailer, exporter	2184242 NZ; Private (Basile)	1959	\$25- 35m*	24	220 Cuba Street Wellington 6011 64 4 384 4056	www.wellingtontrawlingcompany.com
PelcoNZ	Pelco New Zealand	Andy Rolleston Director	Wild capture pelagic fish (Mackerels, Kahawai, Pilchards, Garfish and Tuna)	499562 NZ; Private (Rolleston)	1995	\$25- 35m*	20	32 Portside Drive Mount Maunganui Tauranga 3116 64 7 574 9335	www.pelco-nz.com
Solander	Solander Group	Charles Hufflett Managing Director	Seafood company with NZ and Fiji operations; exporting and wholesaling primarily from Fiji; own vessels	412898 NZ; Private (Hufflett family, others)	1929 /1981	n/a	NZ 15 Fiji 400	Cross Quay, Port Nelson, Nelson 64 3 545 9650	www.solander.com
searcoucts	Sea Products 1998 Ltd	Jason Bull Managing Director	Farmers and exporters of live shellfish (oysters and mussels)	936652 NZ; Private (Bull family)	1998	\$2-5m*	10	57 Firth Street, Drury, Auckland 64 9 294 8024	www.seaproducts.co.nz Paddy Bull Ltd (Coromandel)
AORAĶI	Aoraki Smokehouse Salmon 2012	Matt Evans Managing Director	Salmon farming, processing & hatchery	3940442 NZ; Private (Evans)	1994	\$2-5m*	65	Unit 8, 3 Benmore Place Twizel 7901 64 3 435 3144	www.smokedsalmon.co.nz www.clearwatersalmon.co.nz
S A L M O N	Akaroa Salmon	David Bates General Manager	Salmon farm	135675 Foreign; 80% Philip. (Alliance Select Foods); 20% NZ	1984	\$2-5m*	22	6 Pope Street Riccarton Christchurch 8011 64 3 348 2191	www.akaroasalmon.co.nz www.allianceselectfoods.com

^{*} Estimate based on number of employees and type of business activity; Source: annual reports, company websites, company data, NZ Companies Office, interviews, Kompass, Coriolis estimates

OTHER SEAFOOD FIRM PROFILES



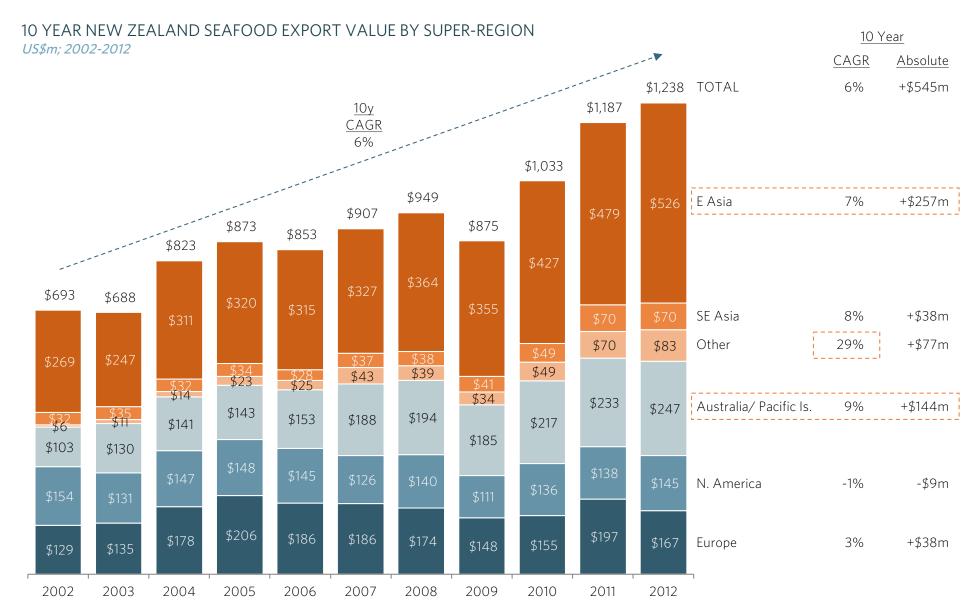
	Company	MD/CEO	Business description	Ownership Company #	Formed	Revenue	Staff	Address	Website
OKAINS BAY	Okains Bay Seafood	Greg Summerton Director	Seafood processing	1794020 NZ; Private (Summerton)	2006	\$2-5m*	25	10, 23 Humphreys Dr Woolston, Christchurch 64 3 339 8173	www.okainsbayseafood.co.nz
WAITUNA BRAND HOREBURN ENTERPRISES LIMITED	Mossburn Enterprises	Victor Thompson Director	Seafood processing; eel & fish	156050 NZ; Private (Thompson)	1964	\$2-5m*	23	37 Kennington Road Kennington Southland 64 3 230 4608	www.waituna.co.nz
urwin	Urwin and Company	John Urwin Managing Director	Seafood processing	154323 NZ; Private (Urwin)	1940	\$2-5m*	20	169 Foreshore Road Bluff, Invercargill 9814 64 3 212 8033	www.urwin.co.nz
EGMONT SEAFOODS LIMITED	Egmont Seafoods Ltd	Keith Mawson Managing Director	Inshore, fishing, wholesalers and exporters	293660 NZ; Private (Mawson, Gould)	1986	\$2-5m*	14	41 Centennial Drive New Plymouth 64 6 751 5700	www.egmontseafoods.co.nz
omega	P.H.R. Processing	Chris Redwood Director	Seafood processing; mussels & clams	1410620 NZ; Private (Redwood, O'Connell)	2003	\$1-2m*	12	4 Seafair Close, Rd 4, Cloudy Bay Industrial Park, Blenheim, 7274 64 3 579 1421	www.omegaseafood.com
	PauaCo Ltd	David Hogg Chairman	Paua processing and marketing to China	3962059 NZ; Prvate (Pacific Canneries, Chung, others Te Anau Fishing Co.)	2012	\$12m*	10	172 Ruru Road, Bromley, CHCH 64 3 982 3008	Recently raised \$10m to form entity and acquire assets of Pacific Canneries, and absorb shares and activity of KABCO and ABCO



SEAFOOD - EXPORTS BY REGION



Over the past decade New Zealand seafood exports have achieved growth driven by Australia, the Pacific Islands and China/East Asia



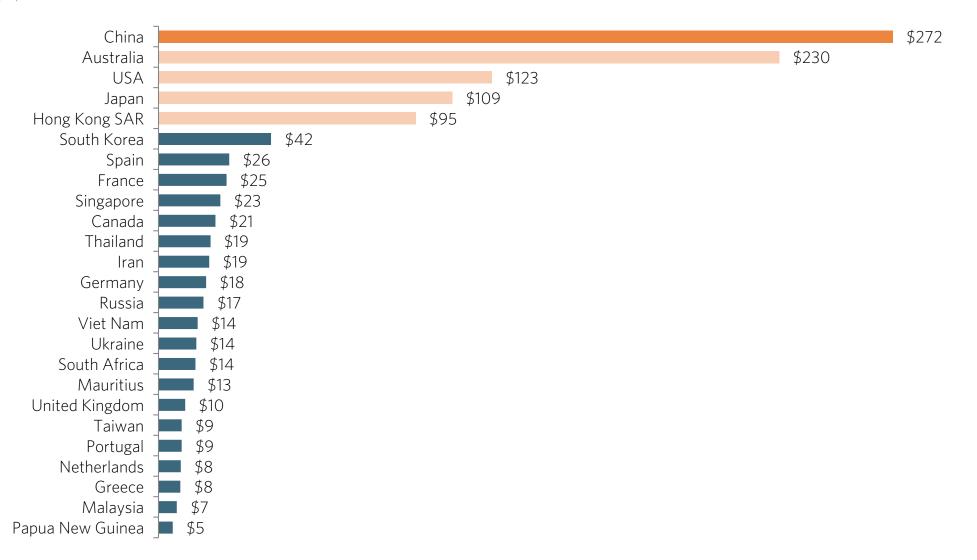
EXPORT DOLLARS



China continues to be the number one seafood export market by value, followed by Australia, the US, Japan and Hong Kong

TOP 25 SEAFOOD MARKETS BY EXPORT VALUE

US\$m; 2012

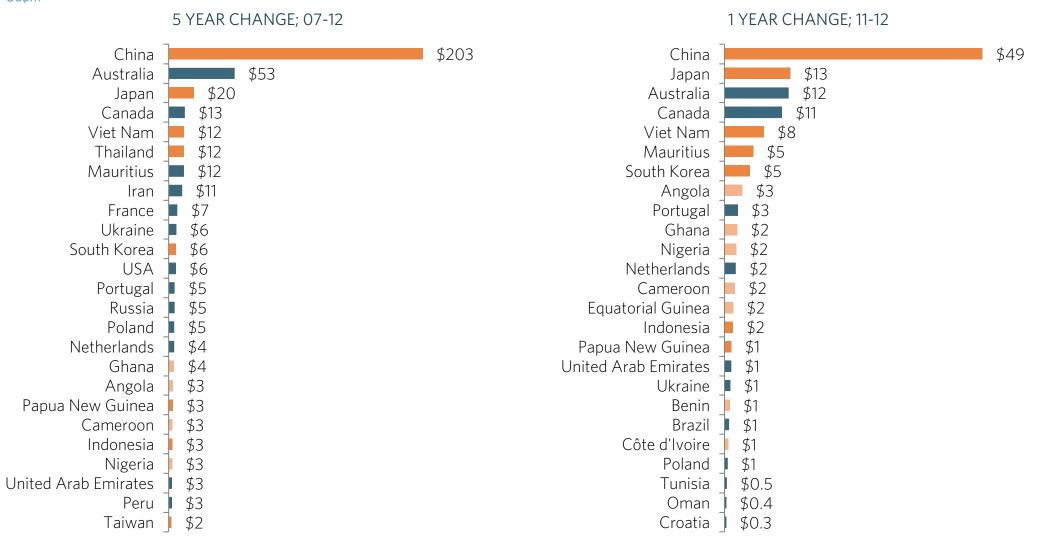


EXPORT DOLLAR GROWTH



China, Japan, Australia and Canada leading dollar value growth; data suggest continued growth in Asia and growth into Africa

TOP 25 SEAFOOD MARKETS BY CHANGE IN EXPORT VALUE US\$m

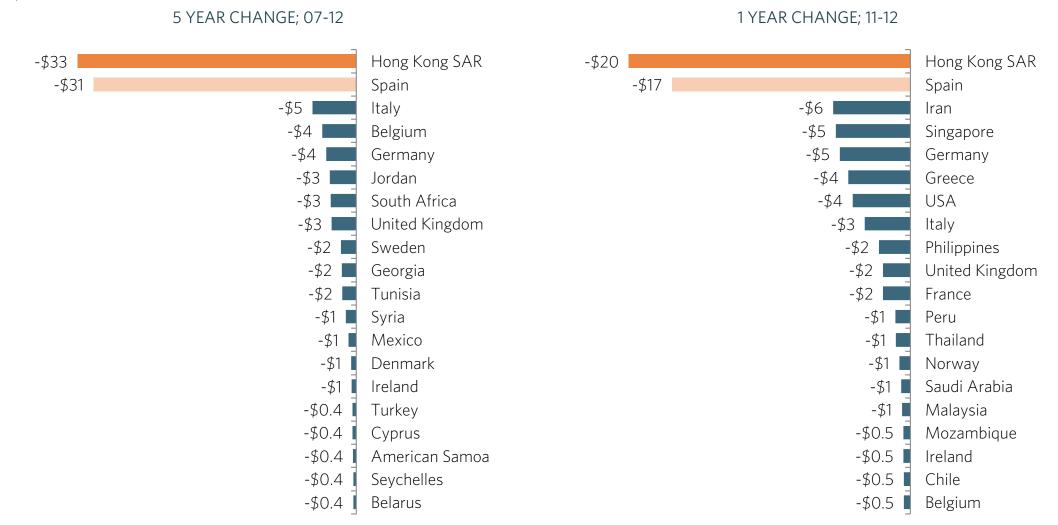


EXPORT DOLLAR DECLINE



Hong Kong and Spain lead declining markets by value; some amount of Hong Kong decline likely now product going to China direct

BOTTOM 25 SEAFOOD MARKETS BY CHANGE IN EXPORT VALUE US\$m

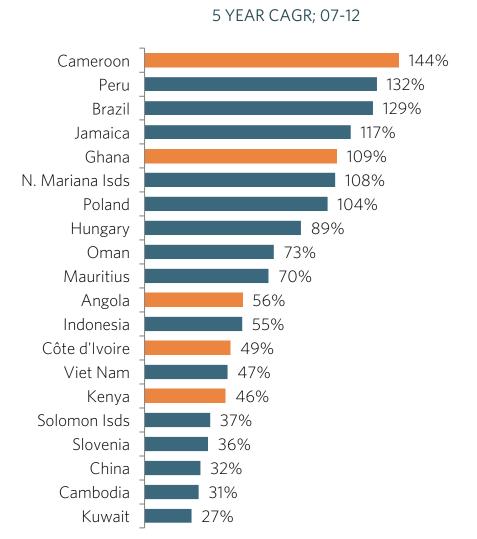




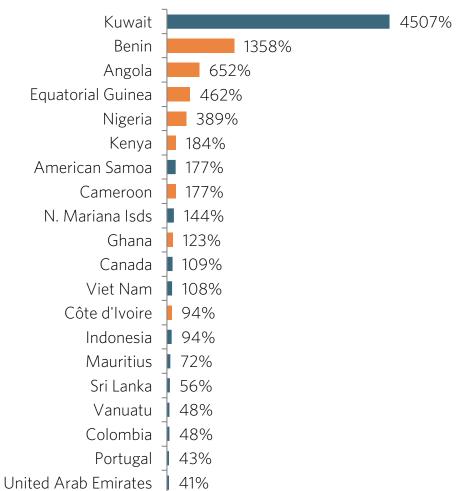
Strong growth rates coming out of Kuwait, parts of Africa and Latin America

TOP 20 SEAFOOD MARKETS BY CAGR PERCENT CHANGE IN EXPORT VALUE

US\$m; %







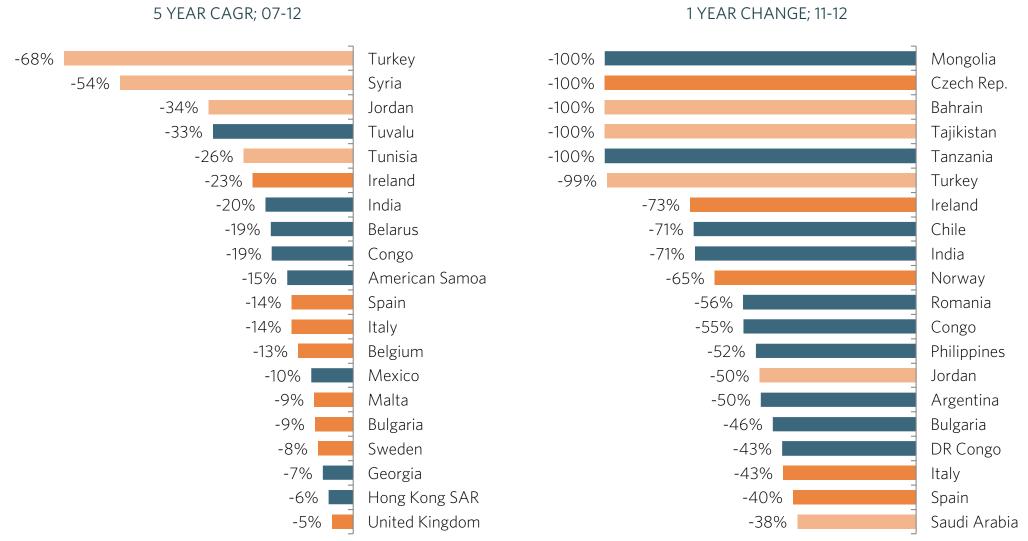
PERCENT DECLINE



Markets by rate of decline hints at reorientation away from secondary Middle East and European markets

BOTTOM 20 SEAFOOD MARKETS BY CAGR PERCENT CHANGE IN EXPORT VALUE

US\$m



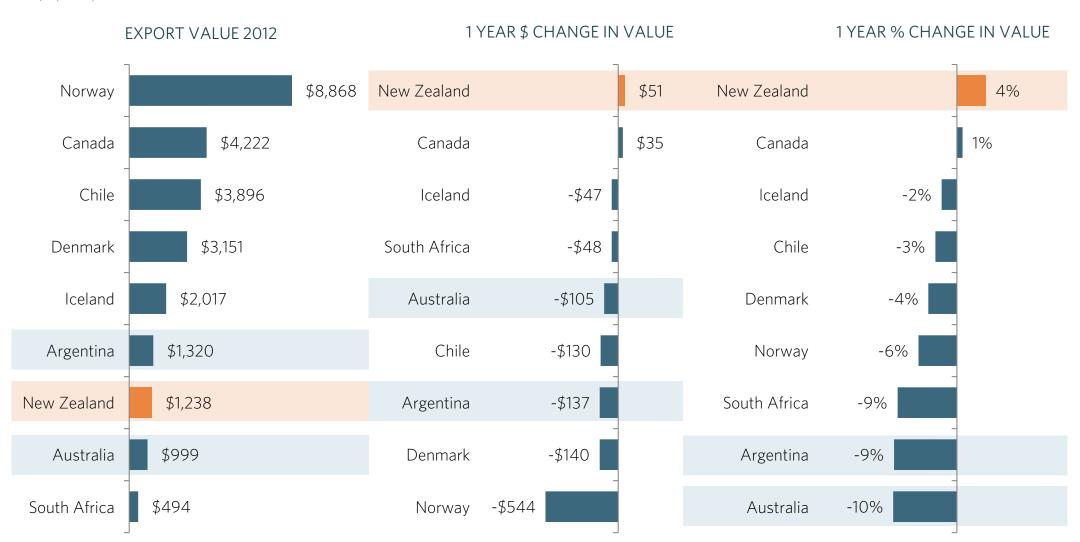
BENCHMARK - EXPORT GROWTH VS. COMPETITORS



New Zealand's had a positive performance in a difficult year globally; the contrast with Australia and Argentina is stark

TOTAL SEAFOOD EXPORT VALUE IN 2012: NZ VS. COMPETITORS

US\$m; 2012; 2012 vs. 2011

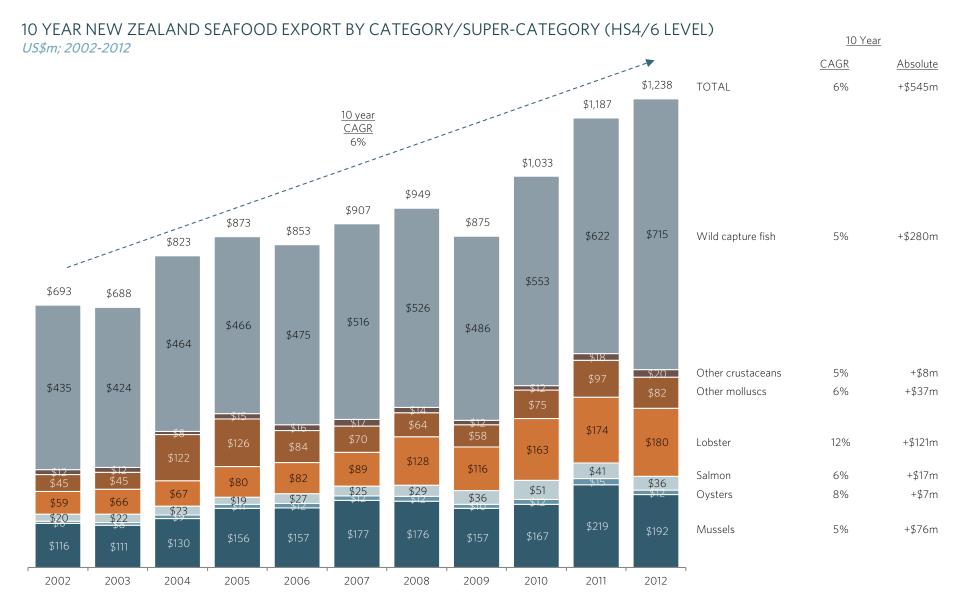




SEAFOOD - EXPORTS BY TYPE



New Zealand seafood export dollars have grown over the past decade at mid single digit rates, other than crayfish/rock lobster which has been the growth standout



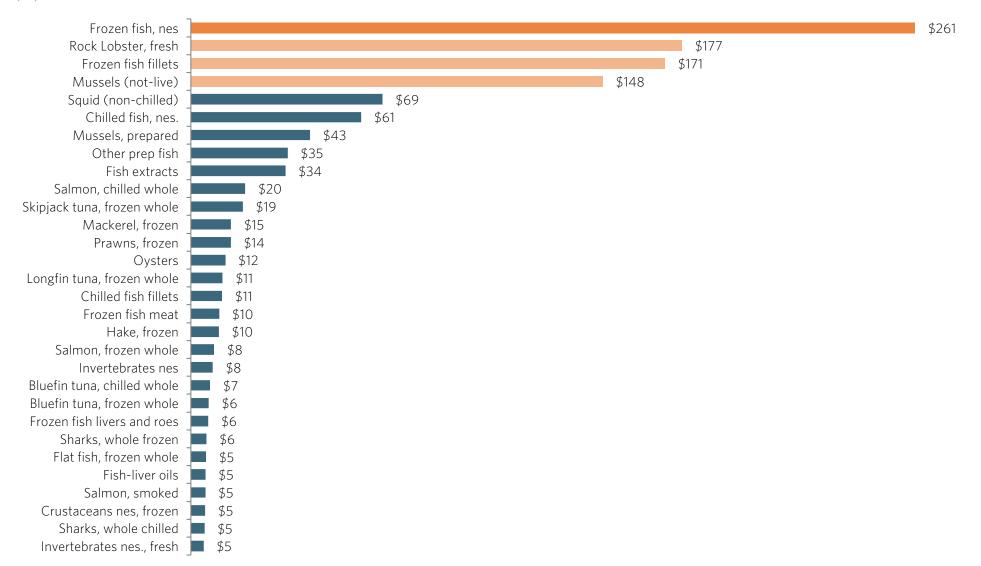
EXPORT DOLLARS



Frozen fish nes (not elsewhere specified), rock lobster, frozen fish fillets and mussels were New Zealand's leading seafood exports in 2012

EXPORT VALUE OF TOP 30 SEAFOOD PRODUCTS (HS6 LEVEL) EXPORTS IN 2012

US\$m; 2012



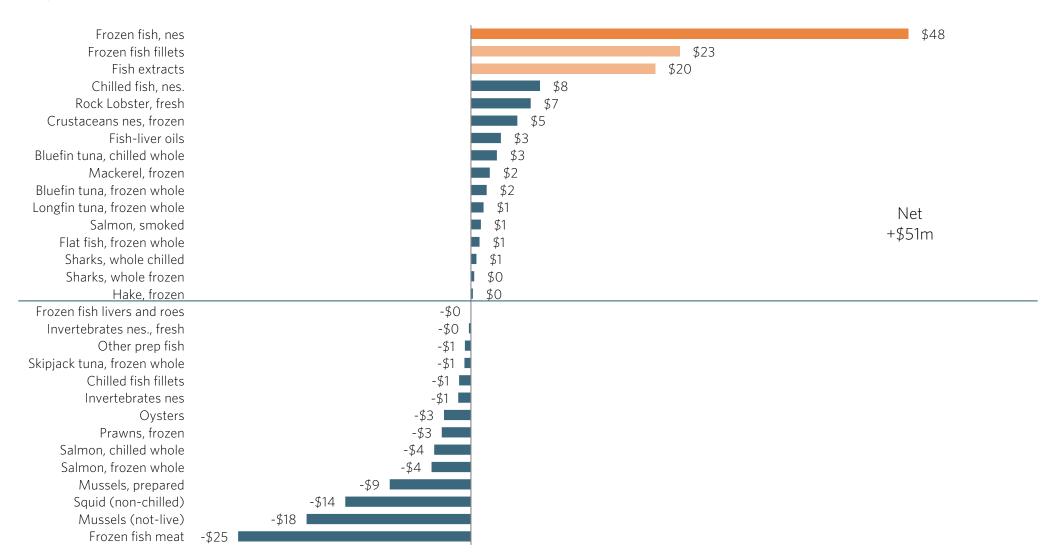
EXPORT DOLLAR GROWTH



In 2012, frozen fish nes, frozen fillets and fish extracts led total value growth; frozen fish meat, mussels and squid led declines

ANNUAL CHANGE IN EXPORT VALUE OF TOP 30 SEAFOOD EXPORTS

US\$m; 2012 vs. 2011



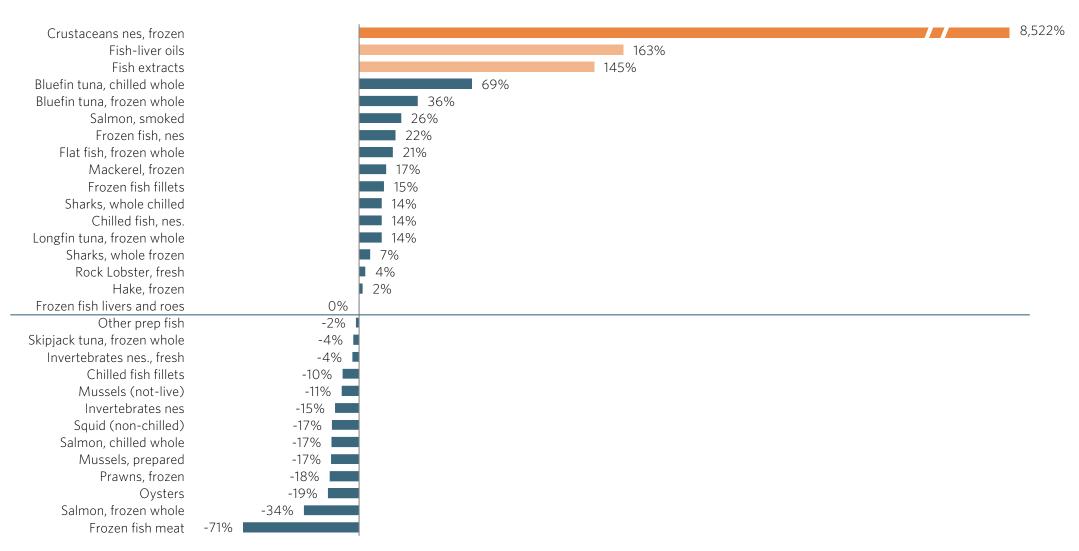
PERCENT GROWTH



In 2012, crustaceans not elsewhere specified, fish liver oils and fish extracts grew at the fastest rate

ANNUAL PERCENT GROWTH IN TOP 22 SEAFOOD EXPORTS

US\$m; 2012 vs. 2011



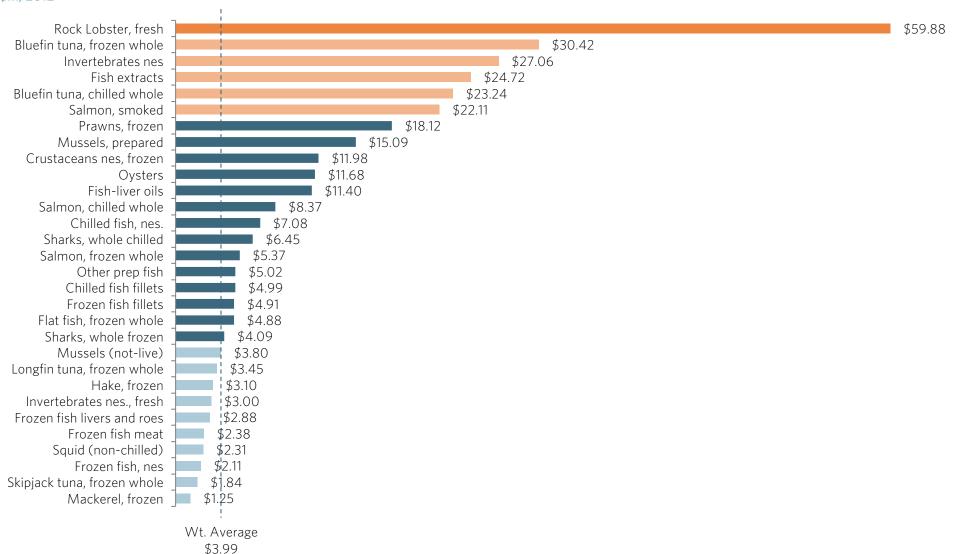




In 2012 rock lobster, bluefin tuna, fish extracts, invertebrates nes and smoked salmon led in terms of export dollars per kilo

VALUE PER KILOGRAM OF TOP 30 SEAFOOD EXPORTS

US\$m; 2012



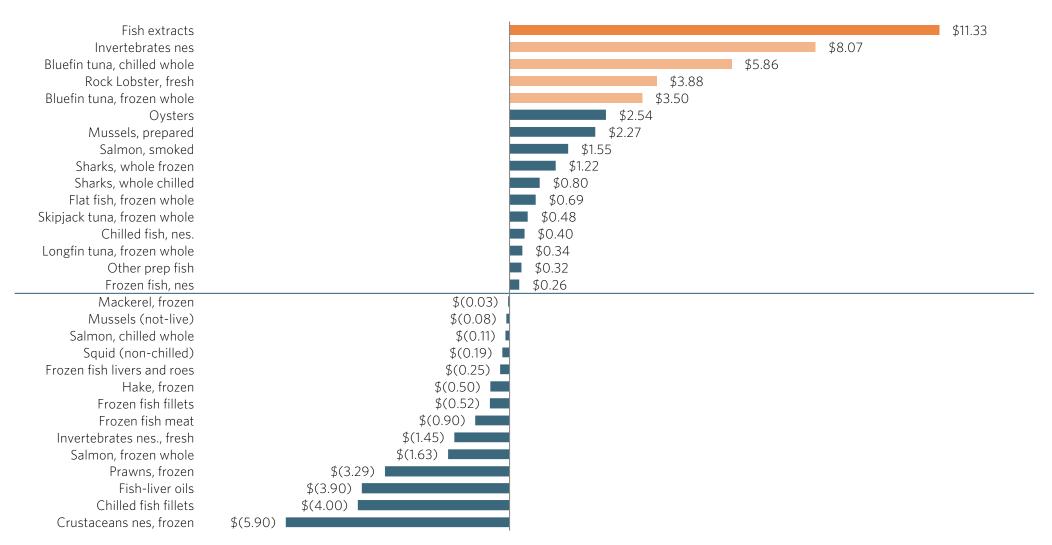
\$/KG CHANGE



In 2012 fish extracts, invertebrates nes, bluefin tuna and rock lobster achieved good price increases

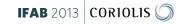
ANNUAL CHANGE IN VALUE PER KILOGRAM OF TOP 30 SEAFOOD EXPORTS

US\$m; 2012 vs. 2011





SEAFOOD - CLASSIFICATION



Seafood can be split into wild capture (four types) and aquaculture (mussels, salmon and oysters)

OVERVIEW OF STRUCTURAL CLASSIFICATIONS OF NEW ZEALAND SEAFOOD PRODUCTION AND EXPORTS 2013

	Category	KEY SPECIES	ANZSIC CLASSIFICATION
Wild capture (A041)	Pelagics	Blue mackerel Squid Tuna Barracouta Jack mackerel	 Line fishing (A041-300) Fish trawling, seining and netting (A041-400) Other fishing (A041-900)¹
	Deepwater	Hoki Orange roughy Ling Southern blue whiting Hake Oreo dory Scampi	
	Inshore finfish	Snapper Bluenose Small sharks Flatfish Red cod Groper John dory	
	Other	Other ²	
	Inshore shellfish Rock lobster Abalone (Paua) Scallops		 Rock lobster & crab potting (A41-100) Other fishing (A041-900)¹
Aquaculture (A02)		Green lipped mussels Salmon Oysters	Longline & rack (offshore) (A020-100)Caged (offshore) (A020-200)Onshore aquaculture (A020-300)

^{1.} Other fishing will capture both other inshore shellfish and all other finfish; 2. Other unclear at source (see note 6 page 5); appears to be minor species (without HS code?); Source: Mfish Fisheries and Aquaculture production and trade period ending Sept 2010; ANZSIC classifications; Coriolis analysis

SEAFOOD - INDUSTRY ORGANISATIONS



The Seafood Industry Council is the primary industry body, supported by a number of other specialised associations

KEY SEAFOOD INDUSTRY ORGANISATIONS1

2013

Funding

SEAFOODINDUSTRY	- Commodity Levies Act	http://www.seafoodindustry.co.nz
Aquaculture New Zealand	 Commodity Levies Act NZ Mussel Industry Council (levy) NZ Salmon Farmers Assn. (levy) NZ Oyster Industry Assn. (levy) 	http://www.aquaculture.org.nz
New Zealand Salmon Farmer's Association Inc.	 Voluntary, subscription based active freshwater and seawater salmon farmers, salmon processors and service product suppliers to the industry 	http://www.salmon.org.nz
new zealand ABALONE FARMERS association	National body supporting the Abalone farmers in NZFormed in 1986, "13 farms"	http://www.nzafa.org.nz
FISHERIES INSHORE NEW ZEALAND	- Annual contributions by quota owners + ACE holders	http://www.inshore.co.nz
New Zealand Oyster Industry Association	- Representing the interests of NZ oyster growers	-
NZ Mussel Industry Council	- Representing the interests of NZ mussel growers	
DeepWater Group	- Formed in 2005; Deepwater fishing quota holders are shareholders and pay a fee based on their quota	http://www.deepwater.co.nz
New Zealand Federation of Commercial Fishermen	- a national body that represents the interests of owner-operator commercial fishermen in New Zealand	http://www.nzfishfed.co.nz
MARINE FARMING ASSOCIATION	- Subscription based organisation representing South Island marine farmers	http://www.nzmfa.co.nz
New Zealand Rock Lobster Industry Council	- The NZ Rock Lobster Industry Council is an umbrella agency representing the interests of New Zealand's nine regional rock lobster fisheries commercial stakeholder organisations	http://www.nzrocklobster.co.nz

SEAFOOD - INDUSTRY SCIENTIFIC RESEARCH



Three organisations have strong involvement in seafood industry research, there are also key specialist organisations

KEY SCIENTIFIC RESEARCH ORGANISATIONS INVOLVED IN SEAFOOD INDUSTRY RESEARCH IN NEW ZEALAND 2013

Taihoro Nukurangi National Institute of Water & Atmospheric Research	 Conducts wide range of activities (e.g. weather forecasting); focuses on atmospheric, marine, and freshwater research – extending from the deep ocean to the upper atmosphere – in New Zealand, the Pacific, Southern Ocear and Antarctica Formed in 1992 restructuring of NZ science sector (combined DSIR & Met Service scientific activities); fisheries research of MAF joined in 1995 Two aquaculture facilities: Bream Bay Aquaculture Park & Mahanga Bay Aquaculture Research Facility Supporting commercialisation of three new (to NZ) aquaculture species: Kingfish, hapuka and abalone (paua) \$50m aquaculture research facility at Bream Bay with 24 staff \$4.6 million selective breeding research programme aims to develop broodstock for three new key high value species: yellowtail kingfish (Seriola lalandi), groper (hapuka, Polyprion oxygeneios) and paua (abalone, Haliotis
	iris). It's supported by industry and MBIE.
A W T H R O N	 Breeding programs around pacific oysters and greenshell mussels around Nelson; developing geoduck Provides research, consulting and analytical services in aquaculture, coastal and freshwater resource use, biosecurity & biotechnology MBIE funding is 40% of total income
Plant & Food RESEARCH RANGAHAU AHUMĀRA KAI	 "Work with the seafood industry to deliver high quality seafood to consumers using sustainable fish production and processing systems" "Working with nutraceutical companies to identify natural marine compounds with potential health promoting properties and develop safe and economical technologies for industrial production"
MAHURANGI	- Established in 2007 – research into breeding of NZ short finned eels

METHODOLOGY & DATA SOURCES



Data was from a variety of sources, and has a number of identified limitations

This report uses a range of information sources, both qualitative and quantitative.

The numbers in this report come from multiple sources. While we believe the data are directionally correct, we recognise the limitations in what information is available. In many cases different data sources disagree (e.g. Statistics New Zealand vs. FAO vs. UN Comtrade). Many data sources themselves incorporate estimates of industry experts (e.g. FAO AgStat). As one example, in many cases, the value and/or volume recorded as exported by one country does not match the amount recorded as being received as imports by the counterparty [for understood reasons]. In addition, in some places, we have made our own clearly noted estimates.

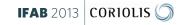
All trade data analysed in all sections of the F&B Information project are calculated and displayed in US\$. This is done for a range of reasons:

- 1. It is the currency most used in international trade
- 2. It allows for cross country comparisons (e.g. vs. Denmark)
- 3. It removes the impact of NZD exchange rate variability
- 4. It is more comprehensible to non-NZ audiences (e.g. foreign investors)
- 5. It is the currency in which the United Nations collects and tabulates global trade data

The opinions expressed in this report represent those of the industry participants interviewed and the authors. These do not necessarily represent those of Coriolis Limited or the New Zealand Government.

Coriolis has not been asked to independently verify or audit the information or material provided to it by or on behalf of the Client or any of the data sources used in the project. The information contained in the report and any commentary has been compiled from information and material supplied by third party sources and publicly available information which may (in part) be inaccurate or incomplete. Coriolis makes no representation, warranty or guarantee, whether express or implied, as to the quality, accuracy, reliability, currency or completeness of the information provided in the report.

If you have any questions about the methodology, sources or accuracy of any part of this report, please contact project lead Tim Morris at Coriolis, on +64 9 623 1848



Project defines the following trade codes as seafood

GLOBAL HARMONISED SYSTEM (HS) TRADE CODES DEFINED AS SEAFOOD

HS2002

2002		
HS Code	Short Description	Longer official description
030192	Live eels	Live eels
030212	Salmon, chilled whole	Fresh or chilled Pacific, Atlantic and Danube salmon
030229	Chilled flat fish	Fresh or chilled flat fish (excl. halibut, plai
030234	Bigeye tuna, chilled	Bigeye tunas (Thunnus obesus), fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers & roes)
030235	Bluefin tuna, chilled	Bluefin tunas (Thunnus thynnus), fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers & roes)
030236	Bluefin tuna, chilled whole	Southern bluefin tunas (Thunnus maccoyii), fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers & roes)
030265	Sharks, whole chilled	Fresh or chilled dogfish and other sharks
030269	Chilled fish, nes.	Fresh or chilled fish, nes
030311	Sockeye salmon, frozen	Sockeye salmon (red salmon) (Oncorhynchus nerka), frozen (excl. fillets/oth. fish meat of 03.04/livers & roes)
030319	Salmon, frozen whole	Pacific salmon (Oncorhynchus gorbuscha/keta/tschawytscha/kisutch/masou/rhodurus), frozen (excl. of 0303.11; excl. fillets/oth. fish meat of 03.04/livers & roes)
030339	Flat fish, frozen whole	Frozen flat fish (excl. halibut, plaice and sol
030341	Longfin tuna, frozen whole	Frozen albacore or longfinned tunas
030343	Skipjack tuna, frozen whole	Frozen skipjack or stripe-bellied bonito
030346	Bluefin tuna, frozen whole	Southern bluefin tunas (Thunnus maccoyii), frozen (excl. fillets/oth. fish meat of 03.04/livers & roes)
030349	Tuna nes, frozen	Frozen tunas, nes
030374	Mackerel, frozen	Frozen mackerel
030375	Sharks, whole frozen	Frozen dogfish and sharks
030376	Eels, frozen	Frozen eels
030378	Hake, frozen	Frozen hake
030379	Frozen fish, nes	Frozen fish, nes
030380	Frozen fish livers and roes	Frozen fish livers and roes
030410	Chilled fish fillets	Fresh or chilled fish fillets
030420	Frozen fish fillets	Frozen fish fillets
030490	Frozen fish meat	Frozen fish meat (excl. fillets)
030541	Salmon, smoked	Smoked Pacific, Atlantic and Danube salmon (inc
030559	Dried fish	Dried fish, not smoked (excl. cod)
030611	Frozen rock lobster	Frozen rock lobster and other sea crawfish
030613	Prawns, frozen	Frozen shrimps and prawns
030619	Crustaceans nes, frozen	Frozen crustaceans,nes,including flours,meals &
030621	Rock Lobster, fresh	Rock lobster and other sea crawfish (excl. froz
030710	Oysters	Oysters
030739	Mussels (not-live)	Mussels (excl. live, fresh or chilled)
030749	Squid (non-chilled)	Cuttle fish and squid (excl. live, fresh or chi
030791	Invertebrates nes., fresh	Aquatic invertebrates, nes, live, fresh or chil
030799	Invertebrates nes	Aquatic invertebrates,nes,includ.flours,meals,p
150410	Fish-liver oils	Fish-liver oils and their fractions
150420	Fish oils	Fish fats, oils and fractions (excl. fish liver
160300	Fish extracts	Extracts and juices of meat, fish and aquatic i
160419	Prep/pres fish nes	Prepared or preserved fish (excl. minced), nes
160420	Other prep fish	Other prepared or preserved fish, nes
160590	Mussels, prepared	Molluscs and other aquatic invertebrates, prepa

GLOSSARY OF TERMS



This report uses the following acronyms and abbreviations

Australian dollar	N/C	Not calculable
Absolute change	N.H	Northern Hemisphere
AU/NZ Standard Industry Classification	NZ	New Zealand
Australia	NZ\$/NZD	New Zealand dollar
Australia and New Zealand	R&D	Research and Development
Billion	S Asia	South Asia (Indian Subcontinent)
Compound Annual Growth Rate	SE Asia	South East Asia
Central & South America (Latin America)	S.H	Southern Hemisphere
Crown Research Institute	SS Africa	Sub-Saharan Africa
Calendar year (ending Dec 21)	T/O	Turnover
East Asia	US/USA	United States of America
Earnings before interest, tax, depreciation and amortization	US\$/USD	United States dollar
Food and Agriculture Organisation of the UN	UK	United Kingdom
Financial year (of firm in question)	US	United States of America
British pounds	YE	Year ending
Joint venture	YTD	Year to date
Million		Sources
Not available/not applicable	AR	Annual report
North Africa / Middle East / Central Asia	СЕ	Coriolis estimate
Not elsewhere classified/not elsewhere specified	Сі	Coriolis interview
	Absolute change AU/NZ Standard Industry Classification Australia Australia and New Zealand Billion Compound Annual Growth Rate Central & South America (Latin America) Crown Research Institute Calendar year (ending Dec 21) East Asia Earnings before interest, tax, depreciation and amortization Food and Agriculture Organisation of the UN Financial year (of firm in question) British pounds Joint venture Million Not available/not applicable North Africa / Middle East / Central Asia	Absolute change N.H AU/NZ Standard Industry Classification NZ Australia NZ\$/NZD Australia and New Zealand R&D Billion S ASIA Compound Annual Growth Rate SE ASIA Central & South America (Latin America) S.H Crown Research Institute SS AFRICA Calendar year (ending Dec 21) T/O East Asia US/USA Earnings before interest, tax, depreciation and amortization Food and Agriculture Organisation of the UN Financial year (of firm in question) US British pounds YE Joint venture YTD Million Not available/not applicable AR North Africa / Middle East / Central Asia CE

Coriolis is a boutique management consulting firm that focuses on food, consumer packaged goods, retailing and foodservice.

Coriolis advises clients on strategy, operations, organization, and mergers and acquisitions. We develop practical, fact-based insights grounded in the real world that guide our clients decisions and actions. Founded in 1999, Coriolis is based in Auckland, New Zealand and works on projects across the Asia Pacific region.

WHAT WE DO

We help our clients assemble the facts needed to guide their big decisions. We make practical recommendations. Where appropriate, we work with them to make change happen.

HOW WE DO IT

Our style is practical and down-to-earth. We try to put ourselves in our clients' shoes and focus on actions. We listen hard, but we are suspicious of the consensus. We provide an external, objective perspective. We are happy to link our fees to results.

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