# Salmon aquaculture

# - part of the solution

As salmon farmers we share common responsibilities to contribute to more sustainable and nutritious food and to create jobs in coastal communities in each of our countries.

These are responsibilities we are proud to have taken and will take in the future.





## **Letter from**

## the President of ISFA

# The world is facing huge challenges. One of them is how supplying a growing population with nutritious and sustainable food.

Climate changes and geopolitical conflicts are putting pressure on agricultural areas. We therefore need to produce more food in the ocean. Aquaculture and salmon farming stands out as an obvious solution. Not just because of the seafood we produce, but due to the innovation within technology and biology which will be an important contribution to increase the global aquaculture food production and make it more sustainable.

As salmon farmers we share common responsibilities to contribute to more sustainable and nutritious food and to create jobs in coastal communities in each of our countries. These are responsibilities we are proud to have taken and will take in the future This relatively young industry has come far in the last fifty years we have existed, and the possibilities seem limitless. But we still have challenges we need to face. Biology eats technology for breakfast, and we have to accept that there are no quick fixes in our industry.

As all other industries we must minimize our environmental footprints throughout the value chain. And we must take good care of the fish throughout its life cycle. Our license to operate assumes sustainable operations, and the expectations stakeholders have to us as an industry are increasing. That is why ISFA is putting more emphasis on international cooperation and communication. We must get the messages across on the significance of our industry and the opportunities we represent, as well as how we deal with challenges. Trust is a key word for any food producer.

Nearly a decade after we published the first socioeconomic report, we are excited to release an updated version of this global status of our industry's impact. That report demonstrated – for the first time – the socio–economic impact that salmon farming has in countries and coastal communities around the globe. In 2024 more than 208 000 people, mostly in rural areas, will produce about 18 billion healthy meals.

Salmon remains a favorite food. In every corner of the world, you will find delicious – and seemingly endless varieties of Atlantic salmon. We want you to know that the salmon you eat has been farmed by hard working and dedicated people who continuously aim to be better. People who are proud to be a part of a key industry when it comes to supplying the world with nutritious, sustainable – and delicious – food.

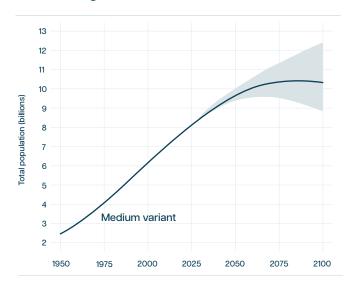
Jon Arne Grøttum

President of ISFA

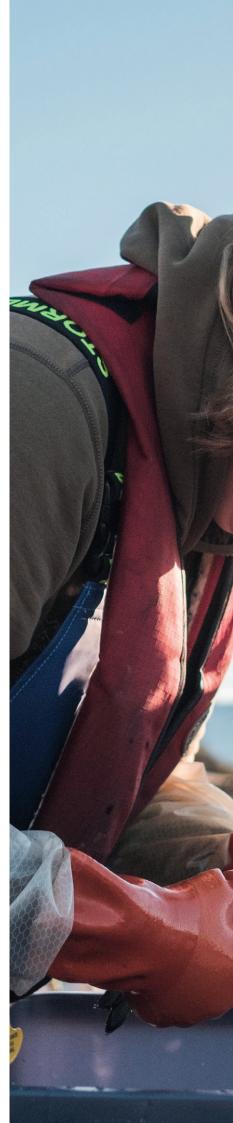
# The major global challenges.

# In order to achieve the UN Sustainable Development Goals, food production must take place within the planet's tolerance limits.

The UN estimates growth from 7.8 billion people in 2020 to 8.5 billion in 2030. Several reports, including the EAT-Lancet report<sup>1</sup> launched in January 2019, point out that the current food system is not designed in a way that will produce enough healthy and sustainable food for one billion more people over the next decade. To date, much of the focus has been on land-based food production. With oceans making up 71 per cent of the planet's surface, more seafood will be needed in order to produce enough healthy and nutritious food for a growing world population.. At the same time, wild fish stocks are maximally fished and certain stocks are threatened by overfishing and inadequate management. FAO's Sofia report from 2018 estimates that as much as 33 per cent of commercially fished wild fish stocks are overfished. The growth in seafood consumption cannot therefore come from wild catch if it is to be sustainable. It is aquaculture that will be the lion's share of the growth.



<sup>&</sup>lt;sup>1</sup> https://www.scientificamerican.com/article/our-broken-global-food-system/, https://eatforum.org/content/uploads/2019/01/ EAT-Lancet\_Commission\_Summary\_Report.pdf





## **Aquaculture**

- part of the solution.



Goal 12 is about ensuring sustainable consumption and production patterns, which is the key to sustain the livelihoods of current and future generations.

In the report The Ocean Economy in 2030, the UN Food and Agriculture Organization (FAO) and the Organization for Economic Co-operation and Development (OECD) point to the importance of the oceans in solving many of our future global challenges. The main premise for the future development and growth of the seafood industry must be that this takes place in an environmentally, socially and economically sustainable manner.

For seafood, as for all other products and services, sustainable development must be seen in a holistic perspective. This also applies to the calculation of the environmental footprint, and one strategy for achieving environmentally sustainable development is to develop targets and measures for reducing the footprint at the product level. The goal of sustainable development must be ensured in all parts of the value chain, including catch, fish production, processing and transport.



			Crown	
Protein retention	28%	37%	21%	13%
Feed conversion ratio ("FCR")	1,3	1,9	3,9	8,0
Edible meat per 100 kg feed	56 kg	39 kg	19 kg	7 kg
Carbon footprint (kg CO2/kg edible meat)	5,1	8,4	12,2	39,0
Water consumption	2 000*	4 300	6 000	15 400

<sup>(\*)</sup> The figure reflects total water footprint for farmed salmonid fillets in Scotland, in relation to weight and content of calories, protein and fat. Source: Mowi Industry Handbook (https://corpsite.azureedge.net/corpsite/wp-content/uploads/2019/06/Salmon-industry-Handbook-2020.pdf)

<sup>-</sup> SINTEF, 2020 (Greenhouse gas emissions of Norwegian seafood products in 2017).

<sup>-</sup> Blue Food Assessment (Environmental performance of blue foods, Gephart et al., 2021) reported GHG emissions for farmed salmon of 5.1 kg CO2/kg edible weight and 8.4 kg CO2/kg edible weight for chicken

## WHAT MAKES SALMON SO EFFICIENT?



Producing fish feed generates the least amount of greenhouse gases compared to feed for cattle, pigs and chickens. In fact, fish feed production generates six times less greenhouse gases compared to cattle feed and almost three times less than pig feed. (New England Aquarium)



As swimming requires less energy than walking, salmon can convert a larger share of its feed into growth than livestock can.



Cold-blooded animals like salmon do not spend energy maintaining body temperature like warmblooded animals.



Salmon has a fillet yield of about 60 per cent and nearly all the processing by-products are used.

# How big is the increase in protein requirements until 2050?

1 kg of feed

2 kg of feed

10 kg of feed



A 56 % food gap between crop calories produced in 2010 and those needed in 2050 under "business as usual" growth



A 539 million-hectare land gap between global agricultural land area in 2010 and expected agricultural expansion by 2050; and



An 11-gigaton GHG mitigation gap between expected agricultural emissions in 2050 and the target level needed to hold global warming below 2°C

As wild fish catches decline, aquaculture production needs to more than double to meet a projected 58 percent increase in fish consumption between 2010 and 2050.



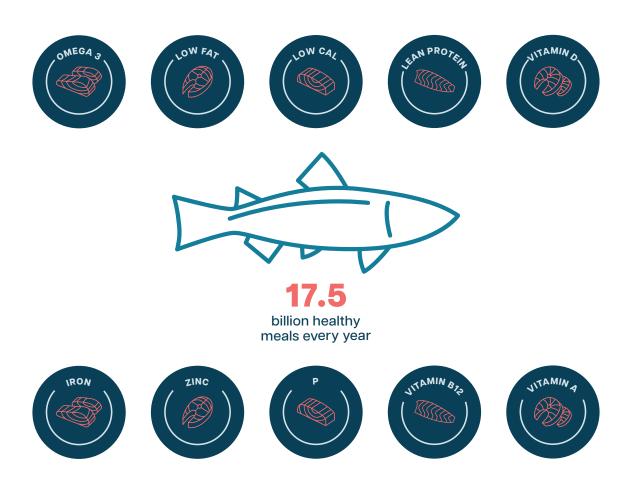


# **Nutritious** and Delicious.



Goal 3 Ensure healthy lives and promote well-being for all at all ages. This includes the fact that with good nutrition comes improved health and wellbeing.

Farm-raised salmon is one of the healthiest foods you can eat and it's available fresh year-round. Eating salmon can help prevent heart disease, lower cholesterol and blood pressure, boost brain function and reduce the risk of cancer, stroke, depression, Alzheimer's disease, arthritis, Crohn's disease, and asthma.



# **Unprecedented** opportunity.



Goal 2 is about creating a world free of hunger by 2030.

The International High-level Panel for a Sustainable Oceans Economy estimates that aquaculture can produce up to six times more food in the oceans than is currently produced, which could meet over 2/3 of the animal protein needs of a future population. The High-level Panel points out that aquaculture is particularly well positioned to contribute to future food security with food that is high in nutrients, contains essential vitamins, minerals and omega-3 fatty acids, and other nutrients not found in plant-based foods and other land based proteins from the land. Much of the increased production will be based on feed raw materials from low-trophic species (e.g. plankton and mesopelagic fish). High-trophic marine species (e.g. salmon) will be in a good position to convert proteins into attractive human food.

Salmon has natural advantages in meeting global needs. In addition, the industry has come a long way in technology development and innovation, which can be transferred to other types of aquaculture production.



# **2,8 million tons** salmon per year.



## A low climate footprint.



DG 13 intends to take urgent action in order to combat climate change and its impacts.

Farm-raised salmon is one of the most eco-efficient and sustainable forms of animal protein available. It has a low carbon footprint, high protein retention, and efficient feed conversion ratio, making it a healthy and climate-friendly protein source to the world's food needs. The London-based, independent Coller FAIRR Protein Producer Index has released its 2022 global ranking of publicly-traded animal protein producers in terms of sustainability. Salmon farmers continue to dominate the top spots: seven out of the top 10 are salmon farmers, and the first and third spots are held by salmon farmers.2

## **Carbon footprint** Greenhouse Gas Emissions, kg,CO2/kg edible product at wholesaler













The carbon footprint of farmed salmon is comparable to that of chicken, and only one tenth of the footprint of beef. (Source: SINTEF). This includes the fact that seafood is transported over longer distances to market than meat.

<sup>2</sup> 2023/24 Report | Protein Producer Index | FAIRR





# Food for OUR FUTURE



...needs to double by

**2050** 

(FAO prediction)

1 in 5

people worldwide relies on fish for their **primary source of protein** 



# FARMED SALMON

A sustainable, healthy food for a **growing population** 

More than

50%
of all fish and seafood originates from aquaculture

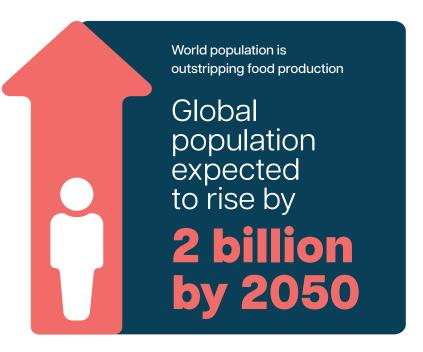
Farmed fish has now surpassed beef in world-wide consumption

Earth Policy Institute

FARMED FISH

FARMED FISH

BEEF



A profound change of the global food and agriculture system is needed to nourish today's 756 million hungry and the additional 2 billion people expected by

**2050** 

- UN sustainable Development Goal #2

50%

of the Earth's wild fish stocks are maximally harvested

Global Salmon Initiative

By 2050, worldwide animal protein consumption will rise nearly

73%

Global Salmon Initiative

The United Nations
Food and Agriculture Organization forecasts a
global seafood
shortage of

50-80 million tonnes by 2030

The amount of **food** that will be **consumed** in the world in the next 50 years

# will exceed

all the food eaten in the rest of human history







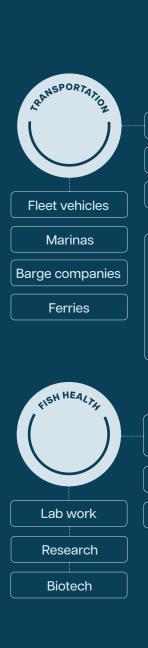


"One of the most consistent of all realities is that no matter who you are, or where you are, you need safe, nutritious, affordable food – every day."

- Jeff Simmons, Elanco President

World fisheries are currently 50% over exploited and natural fisheries will reach full depletion by

2056





Fuel storage and delivery

Wharf facilities

Shipbuilding and repair

> Clothing and equipment

Electricians

Welding

Construction and maintenance

> Rope and equipment

## Salmon farmings ripple effect.



Net washing and repair

Value added

tourism

Advertising

Printing and design

Environmental

monitoring

Veterinerians

**Supplies** 

Air travel

Water taxis

**Trucking** 

Equipment

Marketing and sales

**Packaging** 

**Training** 

Shipping

Cold storage



Aquaculture tech programs

Research institutes

Vet schools

Skill certification programs

Universities



Feed suppliers

Cleaning suppliers

Feeding systems

Diving companies

**Engineering** 

Local shops

Local hotel and

restaurants

**Technicians** 

Feed



Engineering

Service & Supply



Service groups

Fish habitat and enhancement

Community and youth programs

**Financial** institutions

**Professional** services

Communications

Insurance

Certification

Gov't agencies



# **Strengthening** Communities.



Goal 11 is about making cities and human settlements inclusive, safe, resilient and sustainable.

The global salmon farming industry is worth 15.4 billion (USD) but that does not include the significant spinoff jobs and economic prosperity the sector creates in coastal communities around the world.

The salmon farming sector helps drive rural economic diversification by directly and indirectly creating 208,000 jobs, further supporting small businesses and stimulating ongoing, transferable research and development innovation. Salmon farming may well represent the most promising approach to help revitalize our coastal communities and reverse the trend of young people leaving coastal-rural areas to work and live in larger urban centers. The majority of aquaculture jobs are full-time and pay a premium above other local jobs.





# **Salmon** a Global Industry

## **Norway**

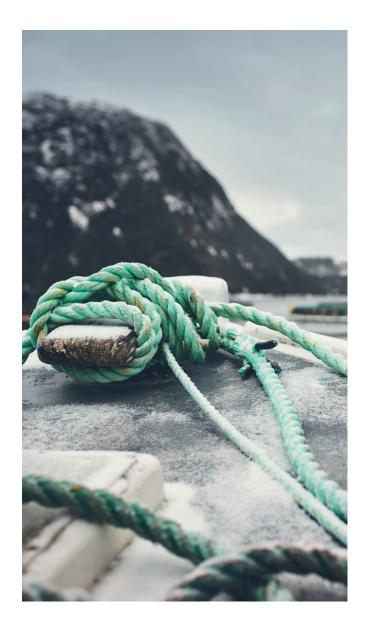
For many years, it has been said that "fish is the new oil". And seafood is indeed looked upon as one of the key industries which will take over for the petroleum sector in Norway. Seafood companies have been the cornerstones of many Norwegian coastal communities for centuries.

Aquaculture is likely Norway's most important response to the challenge faced by the world today: to produce sufficient, healthy food for a rapidly growing population. Today, each job in the core activity of the Norwegian aquaculture industry creates two more jobs in other Norwegian businesses or industry. Each krone created in the core activity of Norwegian aquaculture creates about one krone in value creation in other areas of the Norwegian economy (Sintef, 2019).

The development of an industry responsible for 40 000 Norwegian jobs (both primary production, supplier activity and sales activities) and the delivery of fish to 100 vastly different countries creating more than 17 million meals a day, gives rise to a host of stories. The stories include portraits of brave pioneers, who in the shadow of the first Norwegian oil rigs, developed a second industrial fairy-tale: Norwegian aquaculture.

Aquaculture makes it possible to offer seafood regardless of the seasonal variations that limit traditional fisheries. The industry and public authorities work together to manage these natural conditions, so aquaculture can be developed within a sustainable framework.

Sustainability is at the core of all operations, and we are proud of the many innovations developed by the growing supply sector to the aquaculture industry in Norway. Continuously improving operations throughout the supply chain and working together to meet challenges is the Norwegian way and we are proud of it.



## Chile

# Chile is the second largest salmon producer in the world. After copper salmon is Chile's largest export.

Salmon has become one of the most important drivers in Chile's constant and successful national exporting growth over the past 20 years. In 2023, salmon represented 6.8 per cent of the total Chilean exports, 15 percent of the total non-mining exports and more than 30 percent of the total this country's food shipments.

The salmon farming industry supplies more than 104 international markets, fulfilling the most demanding International quality certifications with emphasis on security, occupational health, food and environment safety. In this way, Chile offers the world a sustainable and quality product that is one of the healthiest and most nourishing foods for human health.

Salmon farming production is concentrated on six south regions of the country: Biobío, La Araucanía, Los Ríos, Los Lagos, Aysén and Magallanes. In Los Lagos and Aysén, salmon farming has become the main developing activity of the regional economy and the most important source of employment for its inhabitants, representing 14 and 35 percent of the regional GDP respectively. It has been an opportunity for youth and women to join the workforce.

Thanks to the production chain the sector creates, these areas have achieved significant improvements in infrastructure and connectivity, as well as an increase in educational opportunities for new generations and a significant improvement in the quality of life for its inhabitants.



## Scotland

Sector growth is underpinned by a focus on scientific research, innovation and improvements to husbandry techniques and fish welfare. Production companies invest in preserving the pristine marine environment on which the industry depends.

Around 60 per cent of Scottish salmon is sold to the UK market where it is the consumers favourite fish. Exports of Scottish farmed salmon have soared from 8,700 tonnes in 1989 to over 64,000 tonnes in 2023. Salmon is Scotland's and the UK's largest food export worth £580m and is sold to more than 50 countries worldwide. In addition to complying with stringent European Union and national regulation, Scottish producers subscribe voluntarily to many other standards - quality standards such as Label Rouge, the environmental standards of GlobalGap and fish welfare standards of RSPCA Assured. These standards apply rigorous criteria and are independently audited.

Since its pioneering beginnings in the 1970's, production of Scottish salmon has risen significantly from 28,000 tonnes in 1989 to an estimated 187,000 tonnes in 2023. Farmgate value has increased from £98M to over £1.2Bn over the same period. All producers are approved under The Code of Good Practice for Scottish Finfish Aquaculture, a voluntary scheme with over 500 points of compliance and covering every stage of production. The Code helps to ensure Scottish salmon maintains its premium standards and allows for sector sustainable development.

The Scottish Government estimate that in addition to the positive direct benefit from investment in aquaculture, the knock-on benefits across the local and wider community and supply chain from investment in aquaculture is the third most productive in terms of generating additional economic output for the Scottish economy. The sector has estimated that growing the value of finfish production by 2030 could create a further 8,000 jobs across the wider supply chain in Scotland, equating to some 18,000 jobs in the sector. Ninety-one per cent of jobs in salmon farming are full time. Expenditure on suppliers and services to maintain production was over £587 million, with almost £381 million of that spent in Scotland. Total expenditure of this nature in Scotland's Highlands and Islands reached £158 million, a significant contribution to the local economy.

This sustainable growth is accompanied by substantial industry investment in farming systems and equipment designs, including new technology to allow farms to operate in more exposed areas.



#### Canada

Farm-raised Salmon has grown in five Canadian provinces, on both the east and west coasts. Atlantic Salmon production accounts for the vast majority of national production. The sector is a source of significant and much needed economic activity and employment in many of Canada's remote coastal areas.

In 2022, the Canadian Salmon farming industry achieved 115, 818 MT of production, resulting in \$3.7 billion CAD in economic activity. Over 11,000 Canadians are employed by the sector. This represents 70 per cent of Canada's total aquaculture production and 85 per cent of its farmgate value.

Provinces on the east coast of Canada, in particular Newfoundland and New Brunswick, have growth targets for the salmon farming sector and are seeing positive incremental growth. In British Columbia, the sector is working very closely with local First Nations, where today 100 per cent of production is under agreement with local First Nations. However, the sector is going through a period of adjustment and there has been a decrease in production. A federal government-led British Columbia "Salmon farming transition plan" is being developed that seeks to position the sector for future innovation and sustainable growth in partnership with local First Nations communities, and other stakeholders.

With the longest coastline in the world and a highly educated population, Canada has a tremendous opportunity to develop its Salmon farming sector. Producers continue to work in close collaboration with local communities to develop capacity, while also improving public understanding of the sector and its great potential. In 2022, the sector launched its national "Performance Commitments" to 2032 to demonstrate



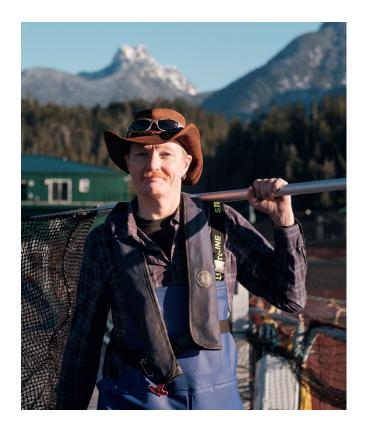
its commitment to innovation and excellence. The sector is committed to working with all stakeholders to support Canada getting back to sustainable growth and to provide low-carbon, healthy protein to North America and the world.

## **United States Of America**

Traditional salmon farming in the United States of America occurs primarily on the east coast. Some limited production also occurs in land based farms in a number of states.

While the combined production of these areas is modest by world standards, salmon farming has played a critical role in diversifying the economic base of traditional coastal and rural communities and preserving endangered working waterfronts. Growth of the U.S. salmon farming sector has been constrained by some of the strictest environmental regulations in the world, a limited number of biologically appropriate sites and extensive development of seasonal, recreational residences in coastal communities.

Operating within this context, U.S. salmon farmers have developed sophisticated Best Management Programs designed to minimize environmental impacts and increase social acceptance. Beginning in 1981, U.S. salmon farmers in cooperation with regulators developed a standardized set of environmental monitoring protocols and methods designed to ensure farms were operating within the local carrying capacity. In 1992, U.S. salmon farmers pioneered the use of third party verification of BMPs and the development of cooperative agreements with the environmental community. These efforts continue today through the implementation of a continuous improvement program.



On the west coast, significant levels of stock enhancement occur using aquaculture methods. A total of 181 hatcheries release over 3 billion Pacific salmonid juveniles annually. Aquaculture enhanced stocks form the basis for substantial commercial and recreational fisheries in California, Washington, Oregon and Alaska. Collectively these fisheries annually generate \$1.2 billion in first point of sale revenues. While percentages vary between states, river systems and over different years, on average 45 per cent of these fisheries are directly dependent on stock enhancement hatcheries using aquaculture methods.



#### Faroe Islands

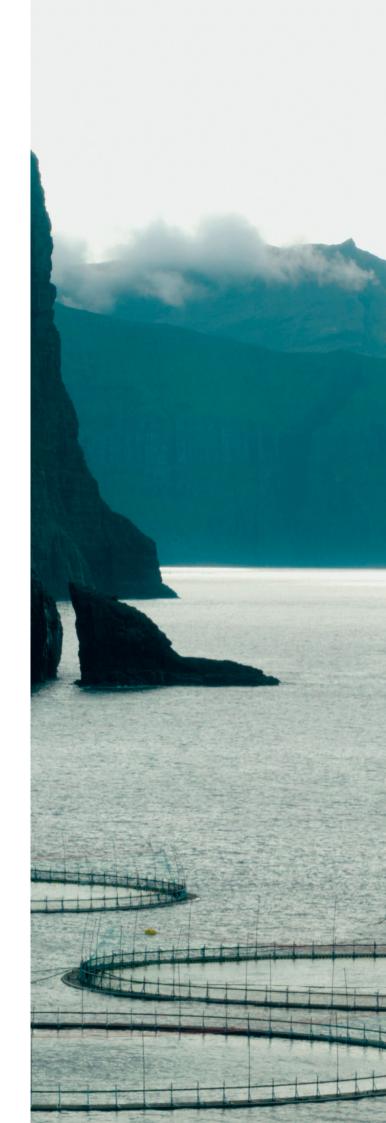
# The Faroese aquaculture industry has a long and proud history, with roots dating back to 1967.

This heritage, combined with ideal natural conditions and a commitment to sustainability and quality, is recognized around the world. The aquaculture industry in the Faroe Islands is committed to maintaining the highest levels of fish welfare and sustainability; this is clearly reflected in the high quality of farmed salmon from the Faroe Islands.

The high demand for top quality Atlantic Salmon from the Faroe Islands, combined with the small size of the archipelago and the commitment to long-term sustainability, means that Faroese producers have a hard time satisfying demand. Farmed salmon is a vital part of the Faroese economy, representing more than 40 per cent of the country's export value and providing valuable jobs for rural communities.

The aquaculture industry in the Faroe Islands is well consolidated, both horizontally and vertically. The vertical integration allows producers to have full control over the quality of the salmon from roe to export. The industry in the Faroe Islands is committed to sustainability and sound stewardship of the environment. The industry worked closely with the Faroese Government to design and implement one of the most stringent aquaculture regulatory regimes governing veterinarian best practices in the world. The goal of the comprehensive legislation was to create the most predictable and sustainable salmon production environment in the world. The legislation ensures strict compliance with the highest level of fish welfare and environmental protection possible.

This exclusive veterinary prevention programme has been so effective that farmed salmon from the Faroe Islands are completely free of any antibiotics.



#### **Iceland**

The seafood industry has always been central to Iceland's heritage, cultural identity and economic prosperity, historically driven by traditional fisheries. While the salmon farming sector in Iceland emerged relatively late, its recent rapid development signifies a notable transformation in Iceland's seafood sector. Salmon production has grown steadily to around 50 thousand tons in 2023, with continued growth anticipated in the coming years.

The rise of salmon farming in Iceland is no coincidence. The Icelandic coastline offers the ideal environmental setting for sea-based salmon farming with optimal sea temperatures, currents, and sheltered fjords. Not only do the fjords of Iceland provide the natural conditions for salmon farming, but Iceland is also perfectly suited to land-based production of salmon, due to access to affordable, renewable energy sources such as hydro, geothermal, and wind power, and abundant water resources, both cold freshwater and geothermally heated seawater. Iceland holds another distinctive advantage in its expertise in seafood processing, notably in optimizing the value of whitefish by-products, which can serve as a modelformaximizingthepotentialofsalmonby-products. These inherent advantages, rooted in Iceland's geography and seafood heritage, have driven significant investment in both sea- and land-based aquaculture in recent years.

Purely considering the economic value potential derived from the growth of aquaculture in Iceland, it is poised to become a substantial part of the Icelandic economy. While the economic prospects of aquaculture expansion in Iceland are promising, both the salmon farming industry and regulatory authorities realise that sustainable growth hinges on balancing environmental and societal considerations with the economic aspect. This is evident in Iceland's cautious approach to aquaculture, with its integration of strong, science-based environmental standards and the strategic closure of large coastal areas near wild salmon rivers to fish farming. This underscores Iceland's commitment to preserving wild salmon population and ensuring a sustainable way for fish farming and wild stocks to co-exist. By prioritizing this balance between economic prosperity and environmental sustainability, Iceland can unlock the full potential of its aquaculture industry, while safeguarding its natural resources for future generations.



#### Ireland

The Irish Aquaculture industry provides essential employment opportunities for rural coastal communities with almost 2,000 direct jobs and over 15,000 indirect jobs in seafood processing and marine ancillary services sectors.

Irish Aquaculture produce is worth €196 million in production value, the majority of that value (€124 million) coming from Irish Organic Salmon, according to the latest BIM Business of Seafood 2022 publication. The employment opportunities provided by the sector has become ever more critical following the impact of Brexit on the fisheries sector on rural coastal communities.

Ireland is the only producer of Organic Salmon in the EU with 100% of Irish farmed salmon certified to Organic standards – meaning that Organic salmon are provided with special diets that contain only organic, natural ingredients from sustainable sources, with fish meal and oil derived from the trimmings of fish caught for human consumption, which is sourced from Irish by-products suppliers. In addition, organic fish feed contains organically certified vegetable ingredients such as peas, beans, sunflower and wheat form part of the diet as well as vitamins and minerals. All ingredients are free from genetically modified organisms. Further as part of meeting certified to Organic standards, no pesticides are used, and farms have very low stocking density compared to commercial salmon farms around the world. Irish organic salmon delivers many health and nutritional benefits - Salmon is high in protein and Omega 3 fats and is a rich source of many important vitamins and minerals that benefit human health.



#### **New Zealand**

New Zealand is the world's largest producer of Chinook (King) salmon, considered the champagne of salmon, with a 2013 harvest of 12,000 tonnes accounting for roughly 70 per cent of total global production.

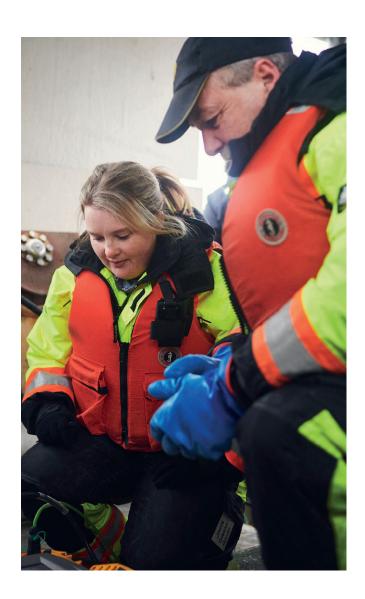
The premium species of salmon, King Salmon is prized for its characteristic rich flavour, delicate soft texture and high Omega-3 content. King Salmon is more challenging to farm than Atlantic salmon, but yields a revered product that typically achieves a premium over the Atlantic variety in most markets.

Last year, the New Zealand salmon industry generated approximately US\$56 million in revenue and provided employment for over 500 hundred Kiwis.

The King salmon are farmed in the pristine, colder waters off the South Island with the majority in sea pens in Marlborough, Canterbury and Southland regions and three small fresh water farms operating in the McKenzie Country hydroelectric-canals. The farms are located in areas selected for their isolation, water quality and flow.

Core to the industry is an uncompromising commitment to the responsible management of its resources. The country's Environmental Codes of Practise are independently recognized as world-leading while low stocking densities and world-class animal husbandry practices ensure the welfare of our fish and the quality of our product.

King Salmon were introduced as ova early in the 1900s from California to establish a recreational fishing run.



A group of dedicated and innovative pioneers first began farming King Salmon in 1970s.

Over the decades, the industry has developed a proud history as a professional, specialized and quality food production sector focused on environmental sustainability, food safety and value added marketing.

### **Tasmania**

Salmon farming commenced in Tasmania in the mid-1980s after a report to the Tasmanian Fisheries Development Authority concluded that a salmon farming industry could be successfully developed in Tasmania.

As a result, in 1984, fertilised Atlantic salmon eggs were purchased from the Gaden Hatchery (Thredbo River, Jindabyne, New South Wales, Australia), which were from stock originally imported in the 1960s from Nova Scotia, Canada. A sea farm was established at Dover in the south of Tasmania and a hatchery was developed at Wayatinah in the central highlands.

The first commercial harvest of 53 tonnes was in the summer of 1986/87. The Tasmanian industry now produces almost 45,000 tonnes per annum. Of the eleven companies that began farming salmon in the mid 1980's, four remain.

Tasmania's primary industries are the engine room of its economy and salmonid (Atlantic salmon and Ocean trout) aquaculture has the potential to significantly power Tasmania's economic growth. The Tasmanian salmonid industry has contributed to Tasmania's reputation as a quality producer of fine foods. Farmed salmonids have become the leading farming activity in Tasmania ahead of dairy, vegetables, poppies, pyrethrum, beef, fine wool, wine and the once iconic apple industry. It has become a standout Tasmanian brand icon.

The industry continues to experience strong sales momentum despite the current challenging economic environment. Approaching \$550 million at wholesale levels, sales are proving resilient. The salmon and trout farming industry currently create over 1,500 direct jobs and \$190 million to the Tasmanian Gross State Product.

Tasmanian Salmon growers employ world best practice in their farming techniques and their dedication to quality processes can be seen, and tasted in the fine texture and flavours of this exquisite seafood delicacy.







THE NEWFOUNDLAND AQUACULTURE INDUSTRY ALLIANCE (NAIA)

ATLANTIC CANADA FISH FARMERS ASSOCIATION (ACFFA)

**BRITISH COLUMBIA SALMON FARMERS ASSOCIATION** 

**CANADIAN AQUACULTURE INDUSTRY ALLIANCE (CAIA)** 

**ICELANDIC AQUACULTURE ASSOCIATION** 

IRISH FARMERS ASSOCIATION - AQUACULTURE (IFA AQUACULTURE)

**FAROESE AQUACULTURE ASSOCIATION** 

MAINE AQUACULTURE ASSOCIATION

THE NEW ZEALAND SALMON FARMERS ASSOCIATION (NZSFA)

NORWEGIAN SEAFOOD FEDERATION

SALMONCHILE

**SALMON SCOTLAND** 

**SALMON TASMANIA** 





International
Salmon
Farmers
Association.