

# The Riches of the sea – Norway's Future



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# The Riches of the Sea – Norway's Future

The Ministry of Fisheries and Coastal Affairs serves as the secretariat for the Minister of Fisheries and Coastal Affairs and exercises its administrative authority through measures such as adoption and implementation of legislation and regulations.

# The Ministry of Fisheries and Coastal Affairs is in charge of:

- the fisheries industry
- the aquaculture industry
- · seafood safety and fish health and -welfare
- ports, infrastructure for maritime transport and preparedness against acute pollution

Some important areas of activity for the Ministry of Fisheries and Coastal Affairs:

- ensuring long-term, optimal exploitation of living marine resources
- ensuring sound management of the marine environment
- contributions towards a profitable, self-sustained fisheries industry
- enhancing the development potential of the aquaculture industry
- improved market access for Norwegian fish
- seafood safety
- working to ensure satisfactory, safe workplaces
- improved navigability and promotion of safety at sea
- promotion of economically competitive maritime transport
- ensuring adequate preparedness against acute pollution



# The Fisheries- and Aquaculture Industry - The World is our Market

Norwegian fisheries policy is founded on sustainable resource management principles, in which considerations relating to the fish stocks, the industry as well as the coastal communities are taken into account. A profitable, sustainable fisheries- and aquaculture industry is essential for Norwegian coastal employment and for generation of marine revenue. The fisheries industry runs without subsidies and is one of Norway's largest export industries.

#### Resource management

Throughout Norway's history, fishing, sealing and whaling have provided an important basis for settlement. Norwegian sea and coastal areas are highly productive and have provided generous fish stocks. As early as in the twelfth century, stockfish was an important export commodity. In the following centuries, fishing, fish processing and seafood exports were established as central industries along much of the Norwegian coast.

During recent decades, the Norwegian fisheries industry has evolved from a virtually unrestricted



activity onto a highly regulated industry with quotas and licensing stipulations. The revolutionary technological developments in the wake of the Second World War have enhanced the efficiency of fishing vessels to such an extent that strict regulations are necessary to prevent over-fishing and depletion of resources. Norway now attaches great importance to research, and actively seeks increased knowledge of the marine environment and resources, as well as expertise on the interaction of different species. Recommendations from Norwegian and foreign marine researchers form a primary basis for fishing quota determination.

## International management

Many fish stocks migrate in and out of the economic zones that mark "national frontiers" at sea. Some stocks live in international areas. 90 per cent of Norway's fisheries are conducted on stocks that are shared with other states. This is the main reason why Norway has fisheries agreements with the EU, Russia, the Faeroe Islands, Iceland and Greenland. Negotiations are held annually to set quotas for the various fish species and establish the rules of conduct. The agreements also regulate how much of the national quotas each nation can fish in waters under jurisdiction. Norway's share of the overall quota is distributed to the various groups of vessels in the national fleet, and each vessel often receives a fixed quota the upcoming year.

Norway monitors national and international fishing vessels closely to ensure compliance with the applicable regulations and quotas. Inspections are carried out both at sea and upon landing of catch. Technical regulations have been introduced to prevent fishing of fish below a defined minimum size limit.

Norway has shown a strong commitment to establish sound management regimes in international waters. Parallel to this, Norway is working to expand its monitoring collaboration with other countries, and has signed agreements to this end with Russia, Iceland, the Faeroe Islands, the EU and individual EU member states.





Norway participates in several global and regional management organisations that are responsible for and provide advice on the management of different stocks of fish:

- Northeast Atlantic Fisheries Commission (NEAFC)
- Northwest Atlantic Fisheries Organisation (NAFO)
- International Whaling Commission (IWC)
- North Atlantic Marine Mammal Commission (NAMMCO)
- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)
- International Commission for the Conservation of Atlantic Tuna (ICCAT)
- South East Atlantic Fisheries Organisation (SEAFO)













## Aquaculture

Today, the Norwegian aquaculture industry is a modern, internationally competitive industry that produces top-quality food efficiently. In financial terms, products from the aquaculture industry constitute more than one-third of Norway's total fish exports, and the industry is of vital importance to employment and settlement patterns along the Norwegian coast. There is great potential within the aquaculture industry to increase employment and the values generated in Norway's outlying areas.

As the ability to increase the output from traditional fisheries is limited, growth to meet the rising global demand for seafood must be achieved within the aquaculture sector. The entire coastline of Norway has proven extremely well suited for fish farming. As the

world's largest producer of Atlantic salmon and a substantial producer of trout, extensive efforts are now focused on developing new species for cultivation, including cod, halibut, catfish and shellfish.

In order to breed and raise fish or shellfish in Norway, a licence from the authorities is required. Undertakings must satisfy requirements that they do not pollute or risk the spreading of fish disease in order to be granted a licence. Furthermore, the facilities must not come into conflict with other interests in the area. Environmental considerations and efforts to safeguard fish health and welfare have been given high priority both in the fish farming industry and within the government administration, and are important factors in ensuring the competitiveness of the Norwegian aquaculture industry.



#### Market without frontiers

The fisheries- and aquaculture industry is part of a global market, and one of the key challenges for Norwegian fisheries policy is to ensure adequate market access for Norwegian fish. The Ministry of Fisheries and Coastal Affairs endeavours to increase the revenue from Norwegian exports, and to add value to production by processing marine raw materials in Norway.

Norway exports fish and fish products to some 150 countries in all parts of the world. On this account priority is given to establish conditions that will enhance the profitability and competitiveness of the Norwegian fisheries- and aquaculture industry. The growth of the Norwegian fisheries- and aquaculture industry is primarily limited by market demand and by Norway's access to markets, not by production capacity. The Norwegian Seafood Export Council provides joint marketing of Norwegian fish on all markets, financed by fees paid by the industry.

Market access for seafood to the EU is not satisfactory and is currently regulated by the EEA Agreement. The EFTA Agreement and the EFTA free trade agreements with third countries ensure favourable tariff conditions



for Norwegian fish in a number of other markets. The Ministry of Fisheries and Coastal Affairs partakes in ongoing efforts to improve global market access through the World Trade Organisation (WTO).

## Health, welfare, safety and quality

Adequate conditions relating to fish health, food safety and quality are necessary in order to fully realise the potential of the Norwegian seafood industry. Moreover, safeguarding fish health is important to ensure fish welfare and to promote profitability in the aquaculture industry. Increasingly, consumers and society at large require assurance that the food products are safe, have been produced under ethically acceptable conditions and maintain the desired level of quality.

Internal controls within the industry must be geared to fulfil consumer demands. The fisheries administration and the Norwegian Food Safety Authority are charged with the responsibility to ensure that Norwegian seafood is produced in accordance with Norwegian obligations under international agreements. To ensure consumer trust in Norwegian seafood both at home and abroad, attention has been focused on food safety throughout the entire chain of production.



## **Coastal Affairs**

A major part of the Norwegian population, and much of the industry, are located along the coast. Consequently, maritime transport and ports play a significant role in the overall national transport system, and contribute towards continued settlement and regional industrial development.

Developments in trade and within maritime transport pose new challenges in relation to the administration of coastal regions and ports. The Ministry of Fisheries and Coastal Affairs is responsible for ensuring navigability and safe seaways, and thereby also protecting the environment. Furthermore, the Ministry is responsible for the emergency response to acute pollution, in particular from oil spills.

#### The importance of navigational aid

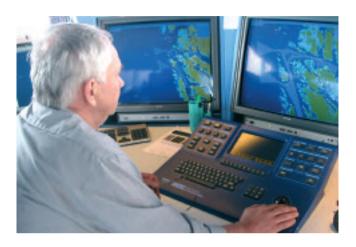
Norwegian seafaring and fishing traditions go back thousands of years. Initial settlements took place by natural harbours, that later on developed into villages and towns. Ports have been subject to government control and regulation since the middle ages.

The development of fishing harbours escalated in the second half of the nineteenth century, and today there are some 750 fishing port facilities, financed by public expenditure. The development and maintenance of fishing ports is part of the government effort to enhance the operative framework for the fishing industry. The pilot service, and the lighthouse and buoy services also boast long traditions. The first statutory order regarding the duty to provide pilot services was issued in 1561. In 1655, the first known lighthouse was lit at Lindesnes.

Modern ships use electronic signals to navigate, in addition to maps and buoys. The American satellite-based global positioning system (GPS) is a widely used electronic navigation system. A system that improves the accuracy of the GPS (dGPS) has been established for all sea travellers along the coast. In addition, the Norwegian Coastal Administration has established an infrastructure for AIS signals (Automatic Identification System). These are important elements in the efforts to enhance safety at sea.

- Lighthouse and buoy services currently encompass some 19 800 installations and other facilities, including 107 lighthouse stations
- There are 4052 beacon lights and lanterns, 13 500 fixed buoys, 1 980 floating buoys, 65 light buoys, 12 dGPS stations, 107 flood lights and 56 radar responder beacons in use.
- The Coastal Administration runs traffic centres in Horten for the Oslo fjord, in Brevik for the Grenland area, at Kvitsøy for Rogaland and at Fedje for the Sture and Mongstad area. A traffic centre for the northern parts of Norway is being built in Vardø.















### The sea as a transport route

More than 50 percent of the domestic transport of goods in Norway goes by sea. This includes transport of oil from the continental shelf to the mainland. About 80 percent of imports and more than 75 percent of all exports are transported by sea. In terms of number of passengers, maritime transport comprises approximately eight percent of public transport.

Strengthening sea transport as an efficient and environment-friendly means of transport is a stated goal. A well-functioning and efficient maritime transportation network is essential to trade and industry along the coast. The introduction of ever faster, larger and deeper-going vessels entails more stringent requirements for good manoeuvring conditions in seaways and ports. For this reason, the Ministry of Fisheries and Coastal Affairs constantly aims at improving navigability and safety in Norwegian waters. Priority tasks in this area includes improve-

ment and marking of sea lanes, operation of pilot services, expansion and operation of traffic centres (VTS) and electronic navigation tools.

Efficient ports and better links between ports and the land-based transport network are important factors to promote trade and industry. Ports must therefore be developed into intersections and terminals for reloading door-to-door. The National Transport Plan emphasises the need to view ports and maritime transport in conjunction with roads, railways and air transport.

## Protection against acute pollution

The Ministry of Fisheries and Coastal Affairs is responsible for maritime infrastructure, sea safety and emergency response in the event of acute pollution. The Norwegian Coastal Administration's Department for Emergency Response is the executing agency for operations and preventive measures with regard to acute pollution, as oil spills.

# **Research and Development**



the potential for creation of added value. There are important benefits that can be reaped from better utilisation of by-products, biotechnology and other previously untapped marine resources. Research in biotechnology and gene technology is expected to contribute towards industrial development of new, highly lucrative special products in areas such as pharmaceuticals, health foods and industrial application of marine raw materials.

Knowledge is the nation's most important economic resource. A highly skilled population represents a national advantage in the context of global competitiveness.

Norway is in the international forefront for fisheries management research. Such research provides an essential government basis for establishing quotas for various fish stocks and for the assessment of questions of food safety and nutrition.

The Ministry of Fisheries and Coastal Affairs endeavours to establish a research activity infrastructure which will provide the scientific foundation and expertise that is needed, in order to make the fisheries administration and the fisheries industry capable of tackling new challenges of a biological, technological, market-related, economic, organisational or legal nature.

Industry-oriented research in the fisheries and aquaculture sector is on the cutting edge internationally. It is the aim of the Ministry to ensure that this knowledge is further developed, in order to realise



## The Ministry of Fisheries and Coastal Affairs

## Department of Aquaculture, Seafood and Markets

The Department of Aquaculture, Seafood and Markets administers all matters concerning the aquaculture industry in relation to the Aquaculture Act and the Act relating to sea ranching. The department deals with quality control of fisheries products from the start producer to end-user, and oversees regulations and monitoring of seafood for the entire production chain, including fish feed and fish health. Market access, the global level (WTO), European level(EU-EEA) and bilateral levels, is another important area of responsibility. The department further contributes to efforts to enhance creation of added value from Norwegian marine products, which includes the overall administration of the Norwegian Seafood Export Council.



#### **Department of Coastal Affairs**

The Department of Coastal Affairs is responsible for maritime infrastructure, preparedness in the event of acute pollution, long-term planning for sea transport through the National Transport Plan, policymaking on ports and fairways, the development of fishing ports and the overall administration of the Norwegian National Coastal Administration. The department also administers the civil navigation policy.

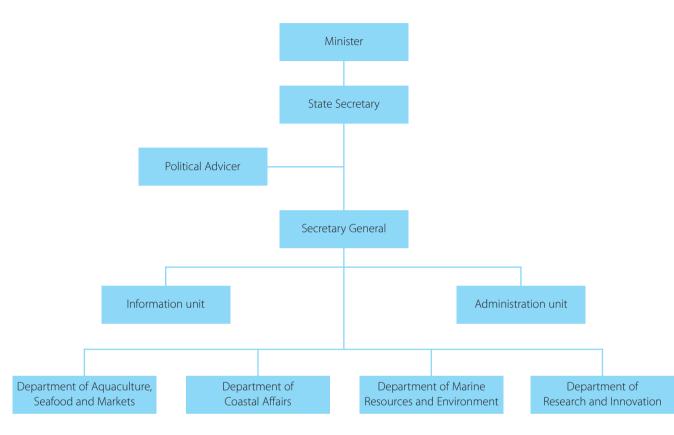
#### **Department of Research and Innovation**

The Department of Research and Innovation is responsible for budgets and financial management, and co-ordinates the administration of the Ministry's subordinate agencies. Furthermore the department administers research- and regional policies, as well as innovation and industrial development within the marine sector.

# Department of Marine Resources and Environment

Department of Marine Resources and Environment deals with matters involving quota negotiations and international fisheries agreements, marine mammals, national regulation of fisheries, annual allotment of the right to participate in fisheries and first-hand sales of fish.

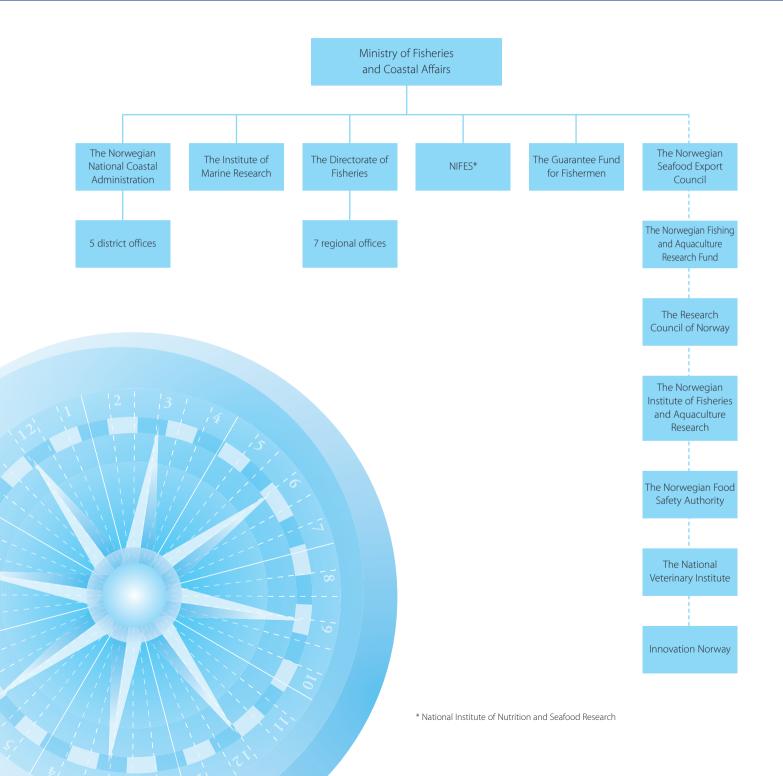
The department co-ordinates the Ministry's environmental policy and participation in international marine environment organisations. Additionally the department co-ordinates matters regarding distribution of resources, the structure of the fishing fleet, licensing and matters pertaining to the overall economic and industrial situation of the fisheries sector and the fishing fleet.







# Agencies associated with the Ministry of Fisheries and Coastal Affairs



The Directorate of Fisheries, has its head office in Bergen, and serves as the Ministry's advisory and executive body in matters pertaining to fishing and the management of aquaculture. The Directorate was founded in 1900, and its main tasks involve regulation, guidance, supervision, resource management and quality control. The Directorate has in recent years undergone significant reorganisation and decentralisation, and the seven regional offices have been assigned new tasks. Their responsibilities include handling individual applications, providing guidance and conducting monitoring and auditing activities, including resource monitoring. The regional offices are also in charge of a number of local offices.

#### fiskeridir.no

The Norwegian National Coastal Administration is the Ministry's advisory and executive body in matters pertaining to the administration of ports, seaways and preparedness in the event of acute pollution. The National Coastal Administration is divided into five coastal districts, each of which has a local regional office. The head office in Ålesund is responsible for the overall administration of these districts. The Norwegian National Coastal Administration was founded in 1974 as a result of the merger of the National Port Authority, the Lighthouses and Buoys Authority and the Pilotage Authority. The National Coastal Administration and the Norwegian Mapping Authority collaborate on sending out correction signals for the American satellite-based GPS navigation system. The Norwegian Armed Forces logistics organisation operates the Loran-C stations on behalf of the Ministry.

#### kystverket.no

**The Institute of Marine Research**, has its head office in Bergen, and serves in an advisory capacity to the Ministry of Fisheries and Coastal Affairs. It performs key tasks in investigation and monitoring of fish stocks and marine mammals, marine and coastal environment, and activities related to aquaculture and sea ranching.

Research on the marine eco-system and the impact of climate fluctuations and human activity is also incorporated into the Institute's advice to the authorities. The Institute has close contact with marine scientists in other countries. Much of the international collaboration is organised through the International Council for Exploration of the Sea (ICES).

#### imr.no

The National Institute of Nutrition and Seafood Research in Bergen serves in an advisory capacity to the fisheries authorities, the Norwegian Food Safety Authority and the fisheries industry on issues concerning nutrition and food safety. The institute also carries out research on nutrition and related subjects.

#### nifes.no



The Norwegian Food Safety Authority, with its head office in Oslo, is a joint subordinate agency under the Ministry of Agriculture and Food, the Ministry of Health and Care Services and The Ministry of Fisheries and Coastal Affairs. The Norwegian Food Safety Authority has eight regional and 64 local offices, and supervises the safety and quality of seafood. The National Fish and Seafood Centre is located in Bergen.

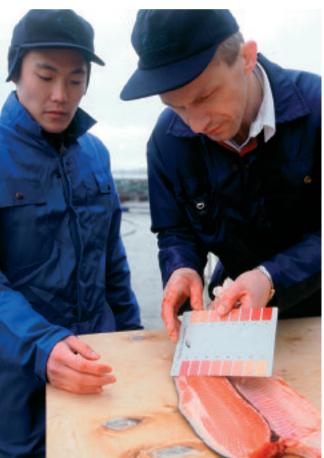
#### mattilsynet.no

**The Guarantee Fund for Fishermen** in Trondheim administers social welfare schemes for fishermen.

gff.no 1

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The Norwegian Institute of Fisheries and Aquaculture Research in Tromsø conducts research in the fields of biology, products and markets on commission from the fishing authorities and other clients.

#### fiskeriforskning.no

**The Norwegian Seafood Export Council** based in Tromsø, is responsible for joint marketing measures for fish and fish products at home and abroad. The Norwegian Seafood Export Council has local representatives in important markets around the world.

#### seafood.no

The Norwegian Fishing and Aquaculture Research Fund is a joint agency that co-ordinates the industry's research activities.

#### fiskerifond.no

**The Research Council of Norway** in Oslo administers a considerable part of the funds available for fisheries-related research according to guidelines issued by the Ministry of Fisheries and Coastal Affairs.

#### forskningsradet.no

**The National Veterinary Institute** serves the Ministry of Agriculture and Food and the Ministry of Fisheries and Coastal Affairs as a leading institute on animal welfare and food safety associated with agricultural food production and the health of aquatic organisms.

#### vetinst.no

**Innovation Norway** is actively involved in the efforts to enhance marine innovation and generation of added value. It administers financial instruments aimed at fleets, aquaculture, and the fisheries industry, according to overall guidelines laid down by the Ministry of Fisheries and Coastal Affairs.

#### invanor.no

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