

FAROE ISLANDS FISHERIES & AQUACULTURE

RESPONSIBLE MANAGEMENT
FOR A SUSTAINABLE FUTURE



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The increase in the service sector has led to a decrease in the number of people who are employed in the manufacturing sector. This is true for all countries. The decrease is most pronounced in the United States, where the manufacturing sector has become the smallest sector of the economy. In the Netherlands, the manufacturing sector has also become the smallest sector, but the decrease is less pronounced than in the United States.

The increase in the service sector and the decrease in the manufacturing sector have led to a change in the composition of the labor force. The labor force is now more service-oriented than in the past. This is true for all countries. The change is most pronounced in the United States, where the service-oriented labor force has become the dominant labor force. In the Netherlands, the service-oriented labor force has also become the dominant labor force, but the change is less pronounced than in the United States.

The change in the composition of the labor force has led to a change in the demand for skills. The demand for skills is now more service-oriented than in the past. This is true for all countries. The change is most pronounced in the United States, where the demand for service-oriented skills has become the dominant demand. In the Netherlands, the demand for service-oriented skills has also become the dominant demand, but the change is less pronounced than in the United States.

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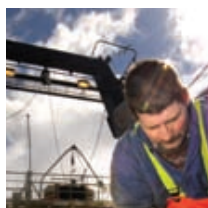
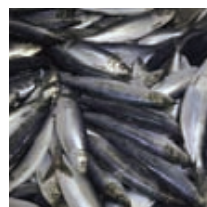
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**– A small nation
with a big stake
in sustainable use of
marine resources.**

Few other countries today have such a high level of dependency on the sea and its resources as the Faroe Islands.

Over the centuries the Faroese have developed the skills and expertise necessary to make the most of the valuable living resources of the North Atlantic around us.

The Faroe Islands are a small nation with a big stake in ensuring the sustainable use of marine resources. Safeguarding the marine environment and using its resources sustainably is a major responsibility the Faroe Islands share both with our North Atlantic neighbours and with the rest of the international community.

Faroese fisheries and aquaculture are multifaceted. They not only contribute to global food security, but they also supply international markets with high quality products and provide the people of the Faroe Islands with sustainable livelihoods. Our aim is to ensure that fisheries and aquaculture can continue to provide these benefits. This can only be achieved through effective and responsible management. It is vital that all sectors work together, both nationally and internationally, to conserve our valuable natural resources and their environment.

This brochure presents an overview of Faroese policies and approaches to the responsible management of fisheries and aquaculture. It has been produced in cooperation between the relevant government ministries and agencies, scientific institutes, and fisheries associations.



Maria Olsen



The Faroe Islands in brief

Located half way between Scotland and Iceland in the Northeast Atlantic, the Faroe Islands are an archipelago of 18 mountainous islands, with a total land area of 1,399 square km, a sea area of 274,000 square km and a population of just over 48,000. The language of the Faroe Islands is Faroese. It is a Nordic language, which derives from the language of the Norsemen who settled the islands some 1200 years ago.

The Faroe Islands are a self-governing nation under the sovereignty of the Kingdom of Denmark. They have exclusive competence to legislate and govern independently in a wide range of areas. These include the conservation and management of living marine resources within the 200-mile fisheries zone, protection of the marine environment, sub-surface resources, trade, fiscal and industrial relations, transport, communications, culture, education and research.

Although Denmark is a member state of the European union, the Faroe Islands have chosen to remain outside the union. Accordingly, the Faroe Islands negotiate their own trade and fisheries agreements with the EU and other countries, and participate actively in a range of international fisheries management arrangements and organisations. Faroese autonomy in foreign relations is provided by a treaty between the Faroe Islands and Denmark which is enacted in legislation.

Although over a third of the Faroese population lives and works in the capital, Tórshavn and surrounding area municipalities are located throughout the islands, the smallest of which is populated by only a single family.



Shaul Schwarz





Maria Olsen

Active participation in all aspects of local community life characterises the Faroe Islands. This contributes to social cohesion and a strong sense of local identity. Infrastructure in the Faroe Islands is extremely well developed: telecommunications and high speed internet plus a comprehensive road network and tunnel and ferry connections all provide an excellent base for maintaining the economic, social and cultural viability of communities all around the country.

The Faroe Islands have a well-educated population, with free primary and secondary schooling for all and a number of institutions for higher education and research. Many Faroese study and work abroad in a wide range of fields before returning home. With the characteristic mobility and flexibility of many island nations, the Faroese people, too, have long maintained and nurtured a broad international perspective in today's globalised world.

THE FAROES AND INTERNATIONAL TRADE

Free access to markets and the removal of trade barriers for fisheries products is an essential element in stimulating a more sustainable use of fisheries resources. It is also important for maintaining a stable supply of food for markets around the world. The liberalisation of trade in fisheries products is a priority for the Faroe Islands in international free trade negotiations and discussions, including within the World Trade Organization. In addition to free trade agreements with the EU, Switzerland and Norway, and a Most Favoured Nation Treatment agreement

with the Russian Federation, the Faroes and Iceland have established a common market which encompasses the free movement of goods, services, capital and labour. The Faroes are also seeking broader cooperation with the EU to encompass the free movement of goods, services, capital and persons, as well as other areas of cooperation, such as research, education and civil aviation. The Faroes are also aiming to expand their network of international trading partners through membership of EFTA – the European Free Trade Agreement.

Fisheries and aquaculture

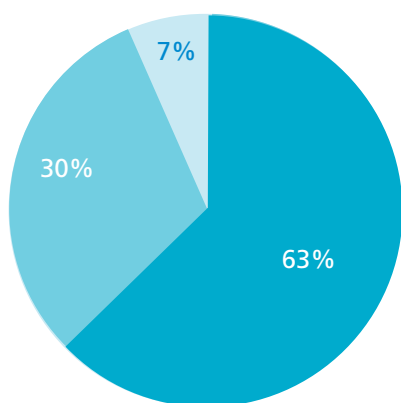
The marine ecosystems around the Faroe Islands are highly productive with a diversity and abundance of marine species. The dynamic system of ocean currents in the area, in particular the inflow of warm Atlantic waters to the northern seas, often called the Gulf Stream, is one of the most important factors for the ecosystem in the region.

The Faroese commercial fishing fleet comprises long-liners, gill-netters, single and pair trawlers, purse seiners and a number of ocean-going factory vessels, as well as smaller coastal vessels. Together they exploit the diversity of marine species and stocks, both within the Faroese 200 mile exclusive fisheries zone, as well as in other zones and international waters.

A large variety of fish stocks is utilised. The most important fish for the Faroese fleet are: the groundfish stocks of cod, haddock, saithe, redfish, ling, tusk, Greenland halibut, anglerfish, greater silver smelt, deep-water stocks like blue ling, roundnose grenadier, black scabbardfish and the pelagic fisheries for herring, blue whiting and mackerel.

The farming of Atlantic salmon and rainbow trout is an important and growing part of total Faroese fish production. The clean, temperate waters and strong currents around the Faroe Islands provide ideal conditions for fish farming.

Faroese fisheries and aquaculture are the basis for the production and export of high quality Faroese fish products, representing 95% of merchandise exports and 20% of total Faroese GDP.



Main fisheries and farmed fish in percent of total tonnes (average 2001- 2006)

- Farmed fish - 42,681 tonnes
- Pelagic fish - 390,860 tonnes
- Ground fish (incl. flatfish, deep sea species & crustaceans) - 184,506 tonnes

Faroese 200 mile exclusive fisheries zone



Fisheries legislation and administration

The objective of Faroese fisheries management is to conserve and utilise marine fish stocks in order to ensure biological and economic sustainability and secure optimal socio-economic benefits from fisheries. Marine resources in Faroese waters and those to which the Faroe Islands have rights through bilateral and international agreements are by law the property of the Faroese people and shall be managed for the public good.

Marine resources: property of the Faroese people

The Ministry of Fisheries and Natural Resources is responsible for the management of all fisheries in Faroese waters and fisheries by Faroese vessels in other waters. The framework for the regulation of commercial fisheries, both in home, foreign and international waters, is the Commercial Fisheries Act of 1994 and its subsequent amendments. Based on this legislation, detailed regulations are implemented governing vessel and fishing licences, area closures, gear and data requirements and other technical regulations for commercial fisheries.

Fishing vessels under the Faroese flag must be at least two-thirds Faroese owned and controlled and subject to taxation in the Faroe Islands.



Shaul Schwarz

Scientific assessment and advice

The Faroese Fisheries Laboratory provides the Ministry of Fisheries and Natural Resources with scientific assessments and advice on the status and management of fish stocks and marine ecosystems around the Faroe Islands.

Faroese marine research aims to provide the best possible scientific basis for responsible exploitation of marine resources. Fish stock assessment is based on investigations such as bottom trawl, acoustic and 0-group surveys carried out by the Faroese research vessel, *Magnus Heinason*, in addition to commercial catch and effort data from logbooks and the sampling of commercial catches for length and age analysis.

This research is incorporated into the specialist working groups under the International Council for the Exploration of the Sea (ICES), which then provide the basis for the Fisheries Laboratory's advice to the Minister. Faroese fisheries scientists also participate within ICES in international scientific assessments of shared fish stocks of importance for Faroese fisheries.

Studies into the dynamics of marine ecosystems in Faroese waters have produced a great deal of valuable information on the ecological relationship between fish stocks and the ecosystems that support them. This is in addition to the assessments and detailed knowledge of fisheries biologists and oceanographers, as well as fishermen's own knowledge and experience. As new knowledge in this area becomes available, it is added to scientific advice on the sustainable utilisation of marine resources.

FAO: THE FAROE ISLANDS AS ASSOCIATE MEMBER

In November 2007 the Faroe Islands were formally admitted as Associate Member of the UN Food and Agriculture Organization, FAO. As an FAO Associate Member, the Faroe Islands will focus in particular on contributing actively to the work of the FAO Committee on Fisheries (COFI) and follow up initiatives to the implementation of the Code of Conduct on Responsible Fishing, responsible fish trade and sustainable aquaculture. Through FAO the Faroe Islands aim to enhance contacts and cooperation with both developed and developing fisheries nations around the world.



Maria Olsen

INTERNATIONAL COOPERATION TO COMBAT ILLEGAL, UNREGULATED AND UNREPORTED (IUU) FISHING

The Northeast Atlantic Fisheries Commission (NEAFC), in which the Faroe Islands actively participate, has comprehensive port state measures to tackle IUU fishing under the NEAFC Control Scheme, monitoring IUU activity in the zones of Contracting Parties, as well as in international waters. Vessels listed on the NEAFC IUU list ("blacklist") are not permitted to call at ports, receive services and supplies or change crew members in any port of the member countries of NEAFC.

NEAFC and NAFO (Northwest Atlantic Fisheries Organization) have agreed to recognize and implement each other's blacklists, creating a trans-North Atlantic system for monitoring and outlawing IUU-listed vessels, with the aim of achieving a global network of co-operation with other regional fisheries management organisations around the world.

Monitoring, control & enforcement

The harvesting licence is an operating licence issued to an individual vessel. The fishing licence specifies the details of fishing activities (catch & area limitations and gear requirements) in which the vessel is permitted to participate, as well as outlining requirements for reporting of catch data and information on landings or transhipments.

All vessels larger than 15 GT must maintain a daily log of their activities in an authorised catch logbook which is issued for this purpose, recording data for each set or haul, and they must also have satellite vessel monitoring systems (VMS) in both national and international waters.

The Faroese Fisheries Inspection is responsible for monitoring and inspecting catches and landings of individual vessels and the weighing-in of catches. This includes both onboard inspection, monitoring of transhipments and inspection of landings in port. Faroese inspection and rescue vessels, in co-operation with Danish naval patrol vessels, provide for a constant patrol presence in Faroese waters. They also contribute to fisheries inspection in international waters of the North Atlantic at regular intervals in collaboration with the inspection services of other nations in the region.



Stakeholder consultation

Decisions regarding the conservation of fish stocks and the management of fisheries are taken in close consultation with the fishing industry.

The Ministry of Fisheries and Natural Resources consults with major fisheries stakeholders on fisheries legislation, regulations and international negotiations. Such consultations take place both through a number of formal standing advisory committees, as well as through focused consultative meetings dealing with specific issues.

When the Minister tables proposals for new or amended fisheries legislation in the Faroese Parliament, the Parliamentary Committee on Industry also consults with relevant stakeholders.



Maria Olsen



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International cooperation on fisheries

Fisheries in other zones and in international waters have long been an important part of total Faroese fisheries catches, both in terms of total tonnage and economic value. Faroese fishermen have a long tradition of fishing in foreign and international waters and have contributed to the development of many fisheries across the North Atlantic over the years

The Faroe Islands have reciprocal fisheries agreements with neighbouring countries in the North Atlantic region – the European Union, Iceland, Norway, Russia and Greenland. These involve the exchange of fishing opportunities which give foreign vessels quotas and access to the Faroes zone in exchange for equal fishing opportunities for the Faroese fleet in their zones. These agreements provide Faroese fishing vessels with the scope and flexibility to pursue a variety of fisheries in the best seasons.

Fisheries in the international waters of the North Atlantic are regulated through the relevant regional fisheries management organisations – NEAFC and NAFO - in which the Faroe Islands participate jointly with Greenland. The Faroe Islands also actively participate in international negotiations towards establishing a regional fisheries body in the South Pacific, where Faroese vessels fish jack mackerel.

COOPERATION ON SHARED & MIGRATORY FISH STOCKS

A number of fish stocks of great importance for the Faroese fishing fleet can be fished both in the Faroese fisheries zone and in the zones of other countries and international waters. Managing and conserving these fish stocks is therefore a shared responsibility requiring close international cooperation between all relevant nations in the region.

Of particular importance for the Faroese fleet are the large pelagic stocks of Atlanto-Scandian herring, blue whiting and mackerel in the Northeast Atlantic, as well as capelin. Redfish fisheries in the Irminger and Norwegian Seas are also important, as are shrimp fisheries in the Northwest Atlantic.

The NEAFC Convention Area



The Faroe Islands are in a central position when it comes to fisheries for blue whiting, Atlanto-Scandian herring and mackerel.

PELAGIC FISHERIES - HERRING, MACKEREL AND BLUE WHITING

The large and economically important stocks of Atlanto-Scandian herring, mackerel & blue whiting are managed through international arrangements which provide the Faroes as a coastal state with an agreed share of the Total Allowable Catch. The proportion of shares between the relevant coastal states is based on factors including fishing history, the extent to which the stocks occur and can be fished commercially in national waters, the level of dependency on fisheries, as well as contribution to scientific research on the stock. Faroese national shares are allocated to vessels in the form of quotas in accordance with these agreements.

Associated agreements between different countries provide agreed levels of access so that these stocks can be fished in other zones. Zonal and seasonal flexibility ensure the optimal and responsible utilisation of resources, in both biological and economic terms.

Fishing for these stocks in international waters is regulated through measures adopted in the Northeast Atlantic Fisheries Commission (NEAFC), based on the management arrangements agreed between the coastal states.



Maria Olsen

Managing fishing effort in the Faroese fisheries zone



Fisheries for groundfish species, in particular cod, haddock and saithe within the Faroese 200-mile fisheries zone are regulated by an effort management system of fishing days, combined with area closures, especially for bottom trawl fisheries, and a range of technical measures. Total fishing effort and the total number of fishing licences are fixed by law.

Within this framework, fishing vessels are grouped by size and gear type, and each group is allocated a set number of fishing days per year, which are then allocated among the vessels in the group. A vessel may transfer fishing days to another vessel in the same vessel group only if it has utilized at least 60% of its fishing days the preceding fishing year. Transfers between vessel groups are restricted with the aim of preventing increases in fishing efficiency in any one vessel group.

VESSEL GROUPS UNDER THE FISHING DAY SYSTEM

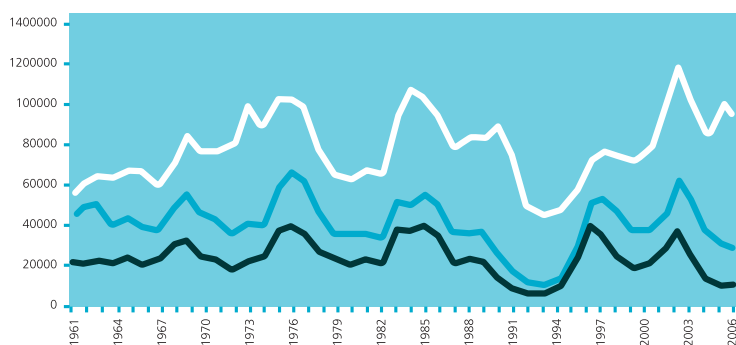
- Pair trawlers
- Long-liners over 110 t
- Coastal vessels larger than 40 t using long lines
- Coastal vessels larger than 40 t using trawls
- Coastal vessels between 15 - 40 t
- Coastal jiggers less than 15 t

The fishing day system manages fishing capacity and effort rather than allocating specific quotas for species and stocks. Developed in close cooperation between the authorities and fisheries organisations, the aim of the system is to provide a flexible and responsive management tool. This allows vessels to adapt their activities within a broad framework of management strategies, while setting overall removals from any given stock at a maximum level.

The effort-based system was designed to take account of the fact that fishing for groundfish species in Faroese waters very often results in a mixed catch, thus basing management on a multi-species approach and the reality of the ecosystem in which fishing takes place. Under this system, the entire catch is legitimate and therefore has an economic value. This also has the clear benefit of removing incentives to discard non-targeted fish or misreport catches, which is often a serious problem in species-specific, quota-based fisheries management. All fish must be landed and registered, providing reli-

Faroese groundfish landings (main stocks) in tonnes, 1961 to 2006

■ Cod ■ Haddock □ Saithe



able and accurate catch data which is vital for ensuring the best quality scientific assessments of fish stocks.

The overall allocation of fishing days is reviewed on an annual basis through a process of consultation in which the fishing industry actively participates. According to the Commercial Fisheries Act, the level of fishing effort (days) for the next fishing year (1 September to 31 August) must be adopted by Parliament, based on a proposal from the Minister, by August 18th each year. The Minister bases his proposal on assessments and recommendations from both the Faroese Fisheries Laboratory and the Fishing Days Committee.

An important basis for scientific advice on the sustainability of fishing effort is the regular monitoring of stock sizes and fishing mortality. Such assessments have been carried out over the last 50 years by ICES and the Faroese Fisheries Laboratory.

The challenge for fisheries management is to respond effectively to changes in the resource base and fishing efficiency, in order to ensure sustainability.

The Fishing Days Committee is comprised of representatives from the fisheries sector and, like the Fisheries Laboratory must also provide the Fisheries Minister with recommendations for what level of fishing days for each vessel group will best ensure that the stocks can be fished sustainably.

Since the introduction of the fishing day system in 1996, the total number of days has been gradually reduced by over 20%, in order to adjust for likely increases in fishing efficiency.

Continuous evaluation of fishing efficiency is, however, necessary to ensure a sustainable balance between resource productivity and the capacity of the fishing fleet. This work is on-going and aims to further improve the basis for allocating the number of days between vessel groups.



Fisheries in the marine ecosystem

In addition to limits on fishing effort, an integral part of Faroese fisheries management is a range of measures which aim to balance fishing in relation to the ecosystem in which it takes place. Such measures include seasonal fisheries closures, the separation of different fishing methods between areas, minimum fish and mesh sizes to prevent catches of immature and young fish, and sorting grids to minimise unwanted by-catch. Such measures are based on scientific assessments, drawing on the expert knowledge of fishermen familiar with changing fishing conditions in the ecosystem around the Faroe Islands.



Closed areas have been used in a targeted way in Faroese waters for many years. At certain times of the year, defined areas, in particular spawning areas, are closed to fisheries either partly or entirely. In addition, 60% of the Faroe Plateau at depths of less than 200 m is closed to trawling for most of the year. Most of the Faroe Bank is permanently closed to trawling. The waters within the entire 12 nautical mile zone on the Faroe Plateau are also closed to all trawling, except for a period in summer when limited trawling for flat fish by smaller vessels is permitted.

PROTECTION OF CORALS

Coral reefs, which provide an important habitat for marine life, have been identified and documented in Faroese waters. Three specific areas are closed to all trawling in order to protect these habitats. The Fisheries Laboratory works in consultation with fishermen to further map the seabed around the Faroes in order to identify additional areas of coral which may be of ecological significance



A major part of the Faroe Plateau and most of the Faroe Bank are off limits to trawling all year round. **Within 12-miles: No trawling** RED: Closed to trawlers all year. BLUE: temporal closures (eg spawning areas) GREEN (C1, C2, C3): coral areas closed to bottom trawlers

Focus on environmentally friendly fishing gear

A priority in both fisheries research and management in the Faroe Islands is the development of fishing gear that minimises the impact of fisheries on other components of the marine ecosystem.

To reduce the impact of trawls on the seabed, as well as to reduce energy consumption of vessels, environmentally-friendly alternatives have been developed, such as trawl undersides with rollers which minimise damage to the seabed when compared to conventional trawl gear.

New sorting grids and other technical adaptations to minimise by-catch in trawling have also been developed. The flexi-grid for use in pelagic trawling, such as the blue whiting fishery, has been shown to significantly reduce by-catch of cod and saithe. All vessels fishing for blue whiting around the Faroe Islands are now required to use this grid in most of the areas where pelagic trawling is permitted, in order to minimise by-catch of saithe.

STRICT MEASURES TO PROTECT YOUNG FISH

Specific and stringent limitations apply in Faroese fisheries regarding the level of young fish permitted in individual catches in Faroese waters. Immediate temporary closures are implemented if catches of young fish are too high.

Captains are legally required to report immediately to the Fisheries Inspection Service if their catches are above the permitted levels of young fish per haul or set. For cod, saithe and haddock around the Faroes, young are defined as cod less than 50 cm in length, saithe less than 55 cm and haddock less than 45 cm. Any single haul or set that contains more than 30% of such fish should be reported immediately, so the authorities can decide whether the area in question should be closed to further fishing to protect the stock.

In addition to these precautionary measures, minimum permitted sizes for groundfish are 40 cm for cod, 37 cm for haddock, and 45 cm for saithe.



Marine environmental protection

For the Faroe Islands, maintaining a clean and productive marine environment is of paramount importance. Reducing the environmental impact of fishing on the marine environment is an essential part of responsible fisheries management today.

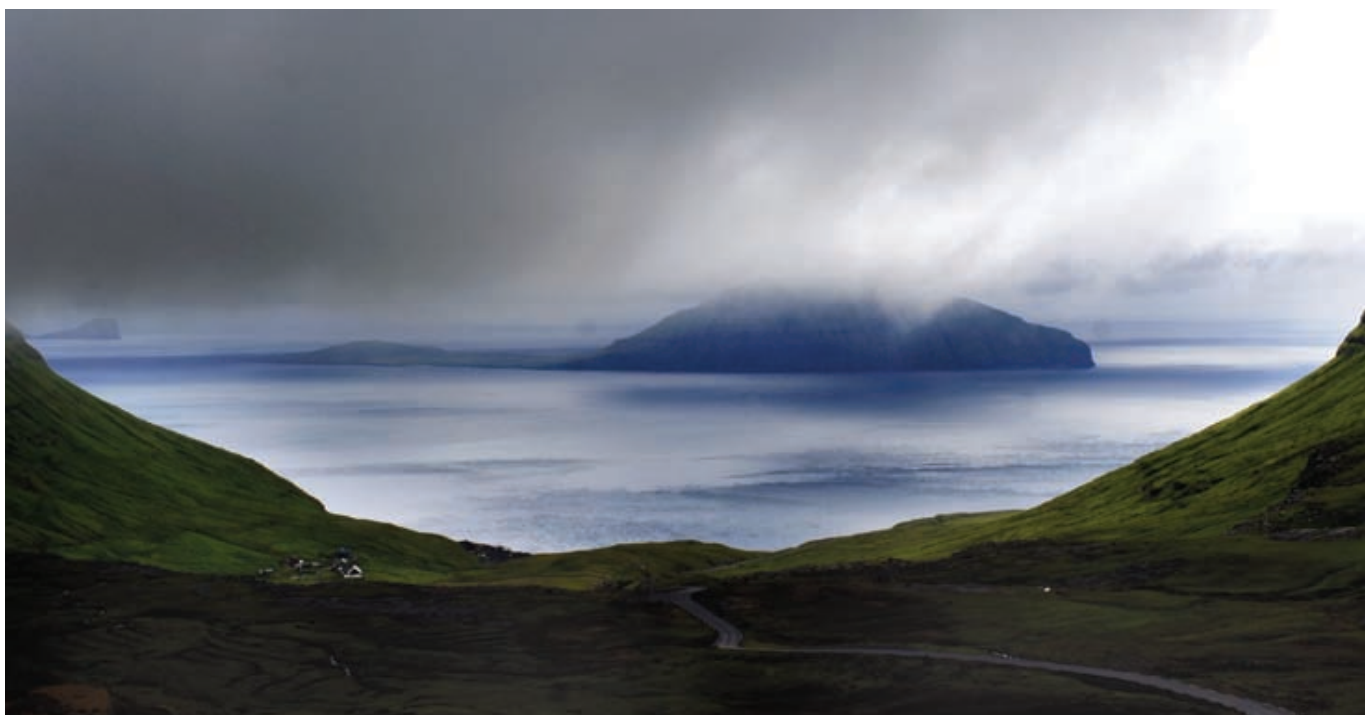
CLIMATE CHANGE AND MARINE PRODUCTIVITY

The effects of climate change on marine ecosystems around the Faroe Islands are of international research interest. Although the impacts are not yet fully understood, research in the Faroe Islands indicates a close relationship between changing weather patterns and the productivity of marine ecosystems. Global warming may lead to significant changes in the dynamics of the system of currents which regulate and determine sea temperatures and productivity of marine ecosystems.

On-going monitoring and modelling of the effects of area and seasonal closures on fish stocks and their habitats is a priority for science-based fisheries management in the Faroes. Work is underway to develop an ecosystem model for the Faroe Plateau, which is capable of providing comprehensive information on optimum and sustainable use of the marine ecosystem.

Marine environmental protection is regulated according to the Marine Environmental Act, with regulations implemented in line with requirements under international conventions such as the MARPOL convention for the Prevention of Pollution from Ships and the OSPAR Convention for the Protection of the Marine Environment in the North Atlantic. The responsible authorities are the Environmental Agency, the Faroese Maritime Authority and the Faroese Fisheries Inspection.

When it comes to marine pollution, local concern is a global concern and a global responsibility. While the seas around the Faroe Islands are amongst the cleanest in the world, the health benefits of marine food can be jeopardised by long-range pollution from industrial sources. Action to ensure sustainable development with respect to oceans and seas must therefore include binding commitments on a global level to reduce emissions of persistent organic pollutants, heavy metals and other contaminants.



Shaul Schwarz

Fisheries research and development

The Fisheries Research Fund is a dedicated research fund established by the Ministry of Fisheries & Natural Resources aimed at stimulating scientific and industrial Research and Development (R&D) projects in the areas of Marine Biotechnology, Fish Harvesting Technology, and Fish Processing Technology.

The emphasis is on collaborative research and development projects between the fisheries and fish production sectors and Faroese research and development institutes to find new ways of maximising our valuable marine resources, both for food and other uses. Enhancing the quality, quantity and range of products that can be made from available marine resources can help reduce wastage in production and relieve pressure on the natural resource base and the marine ecosystem, while also providing new economic opportunities.

Three R&D centres operate within the existing infrastructure of Faroese government administration and research institutes. Each centre is supported by a Programme Committee consisting of researchers and industry representatives. The R&D centres are charged with enhancing scientific capacity of relevance to the industry, by participating in and organizing R&D projects in cooperation with industry and research institutes internationally as well as in the Faroe Islands.

ILLEGAL TO DISCHARGE WASTE AT SEA

It is prohibited to discard trawls, nylon ends, plastic bags, oilskins or any other products containing plastics, which can be a potentially fatal hazard to many forms of marine fauna, such as seabirds. All waste from vessels, including general refuse, waste oil and other products must be taken ashore. The Environment Agency in cooperation with local municipal authorities takes a proactive role in informing vessels of their duties and improving the waste facilities available on shore.



Sustainable aquaculture

The clean, temperate oceanic waters and strong currents in the fjords around the Faroe Islands are ideal for fish farming. In recent years, the Faroese fish farming industry, primarily Atlantic salmon and large rainbow trout, has become an important player on the international farmed fish market. Fish farming today represents a significant and growing component of Faroese economic activity.



Maria Olsen

In Faroese aquaculture policy, safeguarding the environment in which fish farming takes place is fundamental to ensuring an economically self-sufficient and competitive fish farming industry. Measures to minimise the impact of rearing and production methods on the local coastal environment and stringent regimes for veterinary monitoring have been a major factor in the success of Faroese fish farming in recent years.

The Ministry of Trade and Industry is the government authority responsible for the public administration of fish farming in the Faroe Islands. It also maintains the legislative framework and the correct operational framework for the aquaculture industry

FISH FARMING LICENCES

A licence issued by the Office of Public Works is required in order to build, prepare, restructure, expand, buy or operate a farm intended for the rearing of fish. A licence is also required to rear fish, which do not require actual physical farm installations. Licenses for fish farming are only issued when minimum requirements have been met to prevent negative environmental impact, ensure responsible working conditions, and maintain the required high standards for animal welfare and hygiene.



FARMING FAROESE COD – FROM POTENTIAL TO PRODUCTION

The potential for diversifying fish farming to other species, in particular cod, is currently being explored in the Faroes through dedicated research and development projects.

The large and genetically distinct cod from the Faroe Bank has an especially rapid growth rate. Natural conditions in Faroese fjords are also perfectly suited to cod farming. Prospects are therefore very promising for a commercially viable production of farmed Faroese cod, although production is still at an experimental stage.

STRINGENT VETERINARY MONITORING

Fish health and welfare and disease prevention have a high priority in Faroese fish farming policies. Veterinary regulations are based on an agreement between the Faroe Islands and the EU on Veterinary Matters. The approval of imports to the Faroe Islands of all animal livestock, including for fish farming purposes, depends upon the disease status of the exporting country, and must otherwise adhere to existing EU rules, regulations and procedures.

The Fish and Animal Disease Department of the Food and Veterinary Agency is the authority responsible for veterinary matters in relation to the fish farming industry. The Department monitors health status through all stages of production, from broodstock, egg, fry, smolt to the ready-to-harvest fish, based both on monthly health status and biomass reports, as well as on-site inspections. All transportation of fish, fish products and equipment requires the approval of transportation companies and transport units at all stages of production

Through specific requirements for the construction of facilities, fish farms must be able to handle all kinds of risk material without increasing the risk of introducing or spreading disease. Fish farmers must provide detailed production plans, stipulating the timeframe for introducing smolt at sea, harvesting and periods of fallow. This means that a farm can only produce one generation of fish in each production cycle.

THE AQUACULTURE RESEARCH STATION OF THE FAROES

The Aquaculture Research Station (P/F Fiskaaling) aims to provide an active research environment in the Faroes in order to improve knowledge base and ensure quality and productivity in Faroese fish farming. The company focuses in particular on international research cooperation with other institutions and the fish farming industry. Areas of research include farming of existing and new species, gene and biotechnology; feed, water and production practises, enhancing the quality of farmed fish, fish health and farming environment, as well as egg and fry production for research and development projects.

FISH FEED

Fish feed is produced in the Faroe Islands and complies with all relevant EU veterinary directives and regulations for its production and use in fish farming. Fish feed produced in the Faroe Islands is also exported to Norway and Scotland. Some of the feed required for the Faroe fish farming market is also imported, mainly from Norway.



ENVIRONMENTAL SAFEGUARDS IN FISH FARMING

Each fish farming company requires environmental approval from the Environmental Agency. The Agency has set up a system under which fish farming areas in the Faroe Islands must be inspected, and this is based on similar environmental control systems in Norway and Scotland.

The control system requires regular monitoring of the seabed in fish farming areas. This monitoring is part of the obligatory internal control that accompanies the fish farmer's environmental approval. As a result of the limit values in place, the site must not be used if levels of heavy metals become too high or too much organic matter has accumulated. Operations may continue only when the state of the seabed has normalized.

THE FISH FARMING INDUSTRY

The fish farming industry today is comprised of six companies situated around the islands. These companies are all vertically integrated, controlling the entire process of production, from smolt to harvesting and sales. The main markets for Faroese farmed fish products are Europe and Asia.

Food safety and control – international standards

The Faroese fish processing industry is a modern, efficient and competitive industry. Over 70 approved fish processing plants, factory vessels and freezer vessels in the Faroe Islands are engaged in the processing and storing of fish and fish products. Raw material for production is bought at the Faroese Fish Market or directly from boats or fish farms.

Catches brought ashore in the Faroe Islands are either exported fresh or processed mainly into fresh or frozen fillets and portions and salted fish. Other plants process cooked shrimp and scallops, smoked salmon or canned fish. Pelagic fish is also graded and frozen onshore in the Faroe Islands, and dried fish heads and other dried products are also produced, as well as a modern and competitive fish feed production.

A number of modern factory trawlers also process and freeze fish onboard within hours of catching, guaranteeing the best possible freshness. These products mainly include cod, haddock and saithe fillets, headed and gutted cod, haddock and Greenland halibut, surimi and shrimp.

Salted fish is one of the Faroese fishing industry's trade marks. The Faroese began salting fish in the late 19th century and exporting it to southern Europe. Expertise and good quality fish ensure a continued strong position on the market for salted fish products from the Faroe Islands.

FOOD SAFETY STANDARDS AND REGULATIONS

The Food and Veterinary Agency is the authority responsible for monitoring, control and inspection of food safety and hygienic production of consumable products at approved plants. The Agency also provides the official link to foreign scientific institutions within the fish processing industry.

Approval of fish plants and onboard processing vessels requires an internal control system which is in accordance with HACCP rules, in order to ensure that the provisions of the Food Act, and associated regulations, are met at all stages of production and sales. The certification of shore-based fish processing plants stipulates that the water is examined at least 12 times a year. Fishing vessels are only permitted to unload their catches at one of the twenty or so landing centres that have been approved by the Food and Veterinary Agency.

In order to be certified to process food and additives for export to the European Union, Faroese fish plants, factory vessels and freezer vessels must be approved in line with all relevant EU directives on food safety. The Food and Veterinary Agency provides regularly updated overviews of all certified processing plants and facilities, including vessels.

VETERINARY AGREEMENT BETWEEN THE FAROE ISLANDS & THE EUROPEAN COMMUNITY

Since 2001 the Faroe Islands have had a veterinary agreement with the European Community, which is an integral part of the Faroe Islands/EC Free Trade Agreement. Under the terms of the veterinary agreement, the Faroe Islands implement all relevant EU legislation related to food safety in fisheries and aquaculture production. In practice this means the Faroes are on an equal footing with EU member states when it comes to veterinary standards for Faroese fish exports, as well as imports of fish and other products from the EU to the Faroes.



Maria Olsen

ENVIRONMENTAL CONTROL & MONITORING

The Faroese Environmental Agency is responsible for monitoring environmental quality and issuing environmental approval for fish processing facilities, including salmon and trout processing plants. The aim is to minimise all possible sources of pollution from processing plants, as well as to ensure that the best available technology (BAT) is used, with limit values set, especially for waste water outlets.

The monitoring of pollutants in the marine environment is ongoing in the Faroe Islands, including regular monitoring of both farmed and wild fish. Environmental pollutant monitoring in wild fish is based on guidelines adopted by the OSPAR Commission for monitoring contaminants in biota, while monitoring of mercury in white fish for the export market has been carried out since the 1970s.



Shaul Schwarz

Health and safety at sea

Ensuring the health and safety of workers in the fishing industry, not least onboard fishing vessels operating in the rough seas of the Northeast Atlantic, has top priority in the Faroe Islands. According to Faroese law, all seafarers who crew Faroese ships must have an approved sea safety certificate from a certified sea safety course, which must be renewed at least every five years, as well as a valid health clearance. The Faroese Maritime Authority is responsible for ensuring that vessels fulfil all relevant requirements for health and safety onboard in accordance with national and international standards.



The Safety Centre situated in the town of Klaksvík is responsible for sea safety and is approved by the International Maritime Organisation (IMO). The Centre was established in 1999 to address safety requirements as stipulated in Faroese legislation on the manning of ships. Safety courses conducted at the Centre comply with the international Standards of Training, Certification & Watchkeeping, as amended under IMO in 1995. The Safety Centre is the national representative for the Faroe Islands in the International Association for Safety and Survival Training (IASST).

THE FAROE ISLANDS & IMO

The Faroe Islands are an Associate Member of the International Maritime Organization, the specialised agency of the United Nations responsible for improving maritime safety and preventing pollution from ships. The Faroese Maritime Authority is the agency responsible for coordinating Faroese participation in IMO and ensuring the implementation and monitoring of IMO requirements for responsible shipping and international maritime safety standards in the Faroes

SEARCH AND RESCUE AT SEA

Search and Rescue (SAR) services in Faroese waters are coordinated by MRCC Tórshavn (Maritime Rescue Coordination Centre), which was established in 2002 and operates under the authority of the Ministry of Fisheries and Maritime Affairs. The Faroese Inspection and Rescue Service, which cooperates closely with the Danish navy, assists MRCC-Tórshavn in the practical implementation of rescue services with two coastguard vessels, a patrol boat and two helicopters at its disposal.

MRCC Tórshavn cooperates with Search and Rescue Centres in Norway, Denmark, the UK, Iceland and in Greenland in accordance with international conventions under the UN and the International Maritime Organisation (IMO). Tórshavn Radio provides 24 hour monitoring with the responsibility for distress, urgency and safety in Faroese waters.

Employment, training and education

Wages and other employment conditions in Faroese fisheries are negotiated through agreements between the relevant unions. The Vessel Owners' Association, an umbrella association representing all the major vessel groups in the commercial fleet, negotiates wages and other conditions with the Fishermen's Union, the Shipmasters and Navigators' Union and the Engineers' Union. The coastal fishing fleet is organised in the Association of Coastal Fishermen. Agreements outline the percentage share of the catch to which the crew are entitled, labour conditions on board, such as maximum length of watches, as well as holiday, health and pension benefits.

Favourable wage conditions in Faroese fisheries also mean that recruitment into the fishing fleet is generally good, although this can differ greatly between vessel groups. Experience from working in the commercial fishing fleet is seen as an asset on the Faroese labour market, and time-at-sea is a recognised criterion for pursuing further maritime-related training.

FISHERIES AND MARITIME TRAINING AND EDUCATION

Faroe Islanders have gained an excellent reputation in the maritime sector internationally, not only through their long experience in fisheries, but also as mariners and engineers in the international merchant shipping sector. In addition to the general range of secondary and tertiary educational and training opportunities in the Faroe Islands, a number of institutions offer professional studies in the field of fisheries and maritime occupations.

The Fisheries College offers a three year course of secondary education designed to train students for the Faroese fish processing industry and the fish-breeding industry, with emphasis on the particular needs of Faroese industry.

The Maritime School provides students with a five month course that prepares them for work onboard fishing or merchant vessels.

The Centre of Maritime Studies and Engineering has four lines of education, Skipper, Ship's Master, Mechanist and Marine Engineer, intended for manning all vessel types and sizes. Education complies with the international standards for maritime training, providing internationally recognised maritime qualifications.



Shaul Schwarz

North Atlantic cooperation on fisheries and the marine environment

The North Atlantic region has a broad network of regional bodies for international cooperation on the conservation and management of living marine resources and the protection of the marine environment. Active participation in this North Atlantic network of cooperation is a major priority in Faroese marine resource management policies today.



NEAFC: Northeast Atlantic Fisheries Commission –
www.neafc.org

International cooperation on fisheries for pelagic and deep sea fish stocks in the Northeast Atlantic. NEAFC has also adopted measures to close certain areas in international waters to bottom fishing to protect vulnerable marine habitats, including corals and seamounts.



NAFO: Northwest Atlantic Fisheries Organization –
www.nafo.ca

International cooperation on fisheries for fish & shrimp stocks in the Northwest Atlantic, including measures to protect vulnerable marine ecosystems.



NAMMCO: North Atlantic Marine Mammal Commission –
www.nammco.no

International cooperation on the conservation, management and study of marine mammals in the North Atlantic.



NASCO: North Atlantic Salmon Conservation Organization:
www.nasco.org.uk

International cooperation on conservation, restoration, enhancement and rational management of migratory salmon stocks in the North Atlantic



OSPAR – Convention for the Protection of the Marine Environment of the North-east Atlantic –
www.ospar.org

International cooperation on the prevention and elimination of pollution from land-based and offshore sources, dumping or incineration, and assessment of the quality of the marine environment.



ICES – International Council for the Exploration of the Sea –
www.ices.dk

International coordination and promotion of marine research in the North Atlantic, providing scientific advice on fisheries for governments and intergovernmental bodies.



Nordic Council of Ministers –
www.norden.org

Nordic intergovernmental cooperation including cooperation on fisheries, the environment and implementation of the joint Nordic Strategy for Sustainable Development.

For further information

Prime Minister's Office	www.tinganes.fo
Ministry of Foreign Affairs	www.uttanrikisradid.fo
Mission of the Faroes to the EU	www.faroes.be
Mission of the Faroes to the UK and Ireland	www.faroeislands.org.uk
Mission of the Faroes to Denmark	www.faroes.dk
Mission of the Faroes to Iceland	www.faroes.is
Faroese Parliament	www.logting.fo
Faroe Islands Enterprise (Trade and Tourism)	www.samvit.fo

Fisheries management and research

Ministry of Fisheries and Natural Resources	www.fisk.fo
Faroese Fisheries Inspection	www.fve.fo
Faroese Fisheries Laboratory	www.frs.fo
Fisheries Research Fund	www.fvg.fo

Maritime affairs

Faroese Maritime Authority	www.fma.fo
MRCC Tórshavn	www.mrcc.fo
The Safety Centre	www.seasafe.fo

Environment & nature conservation

Ministry of Justice	www.lmr.fo
Environmental Agency	www.us.fo

Aquaculture & food safety

Ministry of Trade and Industry	www.vmr.fo
Food and Veterinary Agency	www.hfs.fo
Office of Public Works	www.landsverk.fo
Aquaculture Research Station	www.fiskaaling.fo

Industry associations & unions

Fish Processing Association	www.industry.fo
Ship Owners Association	www.shipowner-fo.com
Fish Farmers Association	www.industry.fo
Fishermen's Union	www.fiskimannafelag.fo
Association of Coastal Fishermen	www.megf.fo

Education and research

Ministry of Culture	www.mmr.fo
University of the Faroe Islands	www.setur.fo
Faroese Research Council	www.gransking.fo
Centre for Maritime Studies & Engineering	www.vh.fo
Fisheries College (Vestmanna)	www.fiskvest.fo
Maritime School (Klaksvík)	www.klaknav.fo

Culture and the arts

National Library	www.flb.fo
National Historical Museum	www.natmus.fo
National Art Museum	www.art.fo
Nordic House in the Faroe Islands	www.nlh.fo
Faroese Council of Artists	www.lisa.fo

Faroe fish

MAIN SPECIES FISHED AND FARMED



Cod · *Gadus morhua* · toskur



Saithe · *Pollachius virens* · upsi



Haddock · *Melanogrammus aeglefinus* · hýsa



Ling · *Molva molva* · longa



Tusk · *Brosme brosme* · brosma



Monkfish · *Lophius piscatorius* · havtaska



Whiting · *Merlangus merlangus* · hvítungur



Lemon sole · *Microstomus kitt* · tunga



Redfish · *Sebastes mentella* · kongafiskur



Herring · *Clupea harengus* · norðhavssild



Blue Whiting · *Micromesistius poutassou* · svartkjaftur



Mackerel · *Scomber scombrus* · makrelur



Cold Water Shrimp · *Pandalus borealis* · rækja



Atlantic Salmon · *Salmo salar* · laksur



Large rainbow trout · *Oncorhynchus mykiss* · ælabogasil

Names are in English, Latin and Faroese
Illustrations by Astrid Andreassen

the 1990s, the number of people in the UK who are employed in the public sector has increased from 10.5 million to 12.5 million (12.5% of the population).

There are a number of reasons for this increase. One is that the public sector has become a more important part of the economy. Another is that the public sector has become more efficient. A third is that the public sector has become more attractive to workers. A fourth is that the public sector has become more diverse.

The public sector has become a more important part of the economy. In the 1990s, the public sector accounted for 12.5% of the UK's GDP. This was an increase from 10.5% in 1980. The public sector has become a more important part of the economy because it provides a range of services that are essential for the well-being of the population.

The public sector has become more efficient. In the 1990s, the public sector's productivity increased by 10%. This was an increase from 9% in 1980. The public sector has become more efficient because it has adopted a range of cost-cutting measures and has improved its management practices.

The public sector has become more attractive to workers. In the 1990s, the public sector's share of the UK's workforce increased from 10.5% to 12.5%. This was an increase from 9.5% in 1980. The public sector has become more attractive to workers because it offers a range of benefits that are not available in the private sector.

The public sector has become more diverse. In the 1990s, the public sector's workforce became more diverse in terms of age, gender, and ethnicity. This was an increase from 10.5% in 1980. The public sector has become more diverse because it has adopted a range of measures to attract and retain a diverse workforce.

The public sector has become a more important part of the economy, more efficient, more attractive to workers, and more diverse. These changes have made the public sector a more important part of the UK's economy and a more attractive place to work.

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www.fishin.fo

For the Faroe Islands, safeguarding the marine environment and ensuring the sustainable use of its valuable resources is more than a major responsibility – it is an absolute necessity.



FISKI- OG TILFEINGISMÁLARÁÐIÐ
Ministry of Fisheries and Natural Resources