FHF

NORWEGIAN SEAFOOD RESEARCH FUND

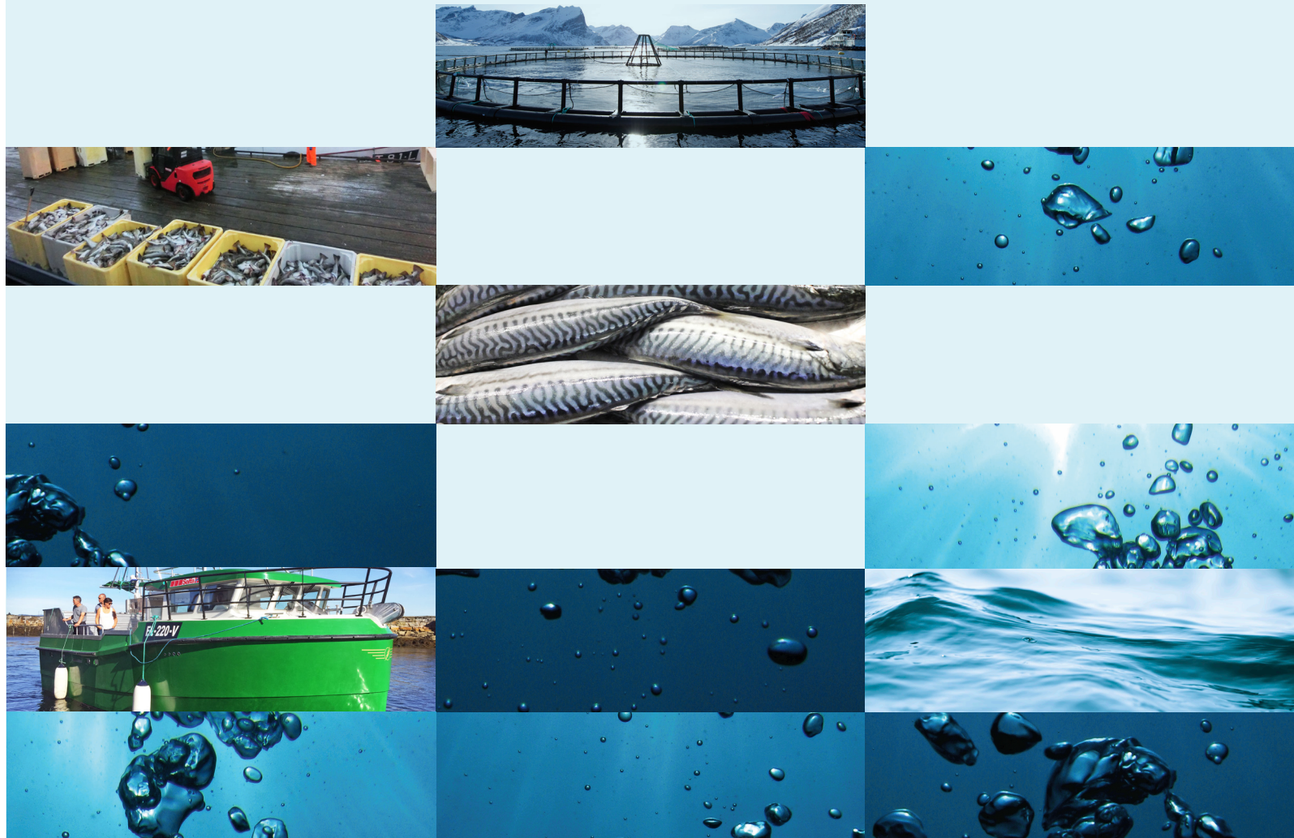
ABOUT FHF

Research and development (R & D) have been essential in developing Norway into a leading global seafood nation, and it will be vital in bringing the industry forward in the future. The research activity is very comprehensive, covers all areas of the industry and is financed by both by the public sector, and the industry itself.

The Norwegian Seafood Research Fund(FHF) is the Norwegian seafood industry's tool in managing the industry's joint investments into industry-based research and development. The clear objective is to create added value for the seafood industry. FHF is financed by the industry itself through an R & D levy on exports of all seafood (currently 0.3%). The FHF Board of Directors is appointed by the Norwegian Ministry of Trade, Industry and Fisheries, and is comprised of representatives from the industry. Industry foundation is further strengthened through a series of advisory groups consisting of active industry players.

FHFs approach when investing in R & D on behalf of the whole industry is aiming at creating value for actors in the industry. FHF must therefore have legitimacy within the industry. This is achieved through good and transparent procedures on how projects arise, how they are prioritised and how they are organised.

FHF has a strong focus on how R & D results are communicated to the industry, to achieve implementation of results and create value. FHF organises the R & D activities along three main value chains; aquaculture, whitefish and pelagics.



HOW DOES FHF WORK

INDUSTRY ANCHORING

Fundamental for FHF is industry anchoring. Priorities must be founded in industry priorities. FHF secures this in several ways. The board is industry based. Industry advisory groups are fundamental in influencing FHF priorities. And industry representatives are contributing through project steering groups or reference groups.

PRIORITIES

Priorities of areas or specific projects come from the close interaction with industry through e.g advisory groups and are found in the annual priorities. FHF also encourages suggestions from participants within the industry, technology suppliers to the industry and from research institutions.

EXECUTING R & D PROJECTS

FHF defines the R & D institution to carry out a project through public calls, through directed calls to several institutions or through direct invitations. In establishing a project and through the project phase, FHF emphasizes strongly the “firewall”, the fundamental requirement that science is solid and not influenced by any industry or other interests.

CREATING VALUE

Results from FHF funded R & D projects shall be communicated and presented to the industry so that they are implemented and create value. FHF takes on a specific responsibility for this, following a completed R & D project.

AQUACULTURE

The Norwegian aquaculture industry is a world leading food industry, where salmon is its main product. The world leading position has been achieved through intensive investments in R & D from the beginning of the salmon industry about 40 years ago.

Investments into R & D continues at a very high level, internally from industry companies themselves, from the Norwegian government, and from the Norwegian Seafood Research Fund – FHF. FHF has organised the R & D activities into three areas.

AQUACULTURE AND ENVIRONMENT

- Documentation of environmental impact
- Salmon lice - non medicinal approach
- Escapes and effects from escapes

QUALITY

- Quality issues, e.g. pigment spots and texture
- Technology development – further automatisation and quality monitoring
- Hygiene – ensure quality and avoid issues like Listeria
- Slaughter process – ensure fish welfare and avoid contamination

FISH HEALTH AND WELFARE

- Documentation of fish welfare
- Reduced mortality through fish health and handling
- Infectious diseases
- Marine fatty acids to document both animal and human effects

WHITEFISH

Norway's primary whitefish species are cod, haddock and saithe, in addition to several other species. The whitefish sector is complex, with a diversified fishing fleet and a processing industry which continuously must develop in order to maintain competitiveness.

Investments in R & D are essential both for the fleet and for the processing industry. It is essential in improving catch control, effectiveness, profitability and environmental impact in the fleet, and, and it is essential in maintaining competitiveness in the industry. FHF's activities are organised in three areas:

Priorities

Fisheries and vessel technology

- Catch control prior to setting gear and haul
- IT systems and improved information sharing for increased effectiveness
- Effectiveness and environmental effects of the fleet

Processing – fresh / frozen

- Develop fully-automated processing lines for fillet production
- Increase knowledge of development of rest raw materials (frozen and fresh) and profitable development of raw materials

Salted and dried processing

- Developing technologies for increased automated processing and competitiveness
- Automated traceability along the value chain
- R & D for increased energy effectiveness in production materials

PELAGICS

The pelagic sector is very important in Norway and constitutes close to 1 million tonnes per year. The most important species for human consumption are mackerel, herring and capelin. Other species like blue whiting are particularly valuable as feed raw materials. Norway's fishing fleet is a world leader when it comes to technology and the processing industry utilises 100% of raw materials but faces the same challenge on profitability as most of processing in Norway. R & D investments are therefore necessary. FHF addresses both the fleet, the fishing technology, the handling of the catch as well as processing.

Priorities

Fisheries and vessel technology

- Catch control prior to haul
- Cost-saving vessel technologies

Catch handling

- Structuring an R & D programme to achieve automated and profitable filleting of mackerel in Norway
- Automated and robotised handling in packaging

Industry

- Automated filleting of mackerel
- Robotisation of hand laying

CROSS SECTOR R & D ACTIVITIES

Some important structural and operational areas are not easily defined within one of the defined value chains, but are nonetheless areas where R & D can make serious contributions to the further development of the Norwegian Seafood Industry. Therefore, FHF addresses these issues separately from the three value chains.

SEAFOOD AND HUMAN HEALTH

Norwegian seafood is exported to over 150 countries and the products are commanding an important role in many of the markets. With Norway being a global leading safood nation comes a responsibility for addressing the importance of sea-food consumption, not least from a health perspective. FHF is therefore financing research studies on effects on human health from seafood consumption. The issues range from diabetes to obesity and mental health. This research has implication not only for the Norwegian seafood industry, but for the global seafood industry and for human health in general.

MARKET ACCESS

Access to markets and the free trade of goods are important to this industry. In many ways that is in the domain of politics and government responsibility. However there is often a need for bringing forward science-based facts to document conse-quences of trade restrictions and conditions. FHF is therefore financing several science-based studies which bring facts to a very important area and are a contribution to achieving reasonable trade conditions.

Photo 1: Emil W. Breistein, Photo 2: NIFES

Photo: Otto Andreassen

COEXISTENCE

The aquaculture and the traditional wild fish activities coexist in the same environment of Norwegian waters. This coexistence is a positive one. However, there are instances where questions can arise as to potential negative influences, particularly from aquaculture towards the traditional fisheries. In these cases, bringing forward solid science-based facts is crucial, in order for such topics to be handled and evaluated on a basis of facts.

Therefore, FHF is financing several studies on potential effects from aquaculture, which could influence the wild fisheries' sector of the seafood industry. These studies are essential in ensuring that the coexistence between the two sectors will continue to be a mutually positive one.

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2016

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Norwegian Seafood Research Fund

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