Examples of operations contributing to promoting environmentally sustainable, resource-efficient, innovative, competitive and knowledge-based fisheries

Operations selected for support through the Swedish Maritime and Fisheries Programme 2014–2020

Jordbruksverket

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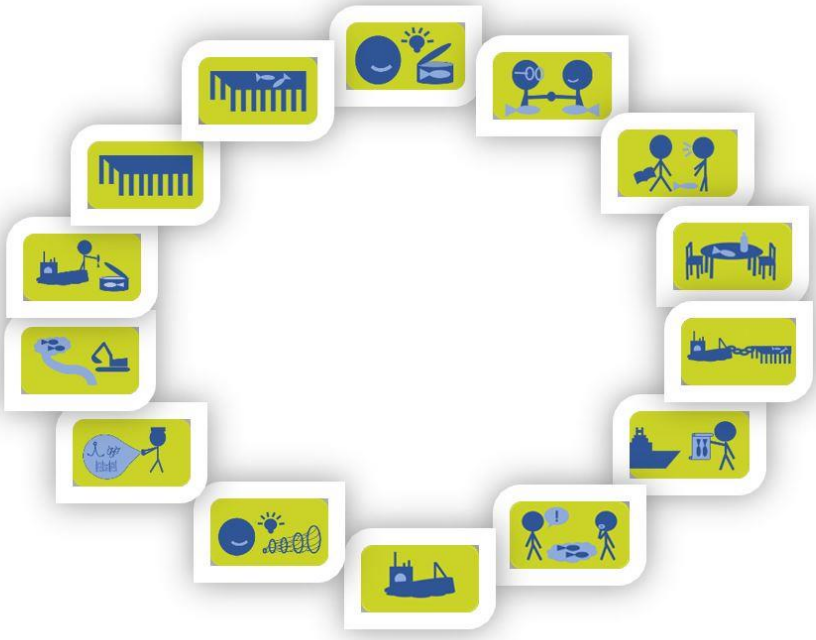

We promote development in the fisheries sector – among other things!

The Swedish Maritime and Fisheries Programme is financed partially with EU support through the European Maritime and Fisheries Fund. This fund is focused on creating positive development in six areas. These areas are called the Union's priorities. The first of these priorities is promoting environmentally sustainable, resource–efficient, innovative, competitive and knowledge–based fisheries. It is operations (projects and investments) that have been selected for support for this development that this document highlights.

This first Union priority hence focuses on promoting the fishing sector, but fishing is not the only focus of the European Maritime and Fisheries Fund. The other five Union priorities focus on (2) fostering aquaculture, (3) fostering the implementation of the Common Fisheries Policy, (4) increasing employment and territorial cohesion, (5) fostering marketing and processing, and (6) fostering the implementation of the Integrated Maritime Policy. What this document highlights is thus only a fraction of the fund's and the Swedish programme's contribution to the Swedish blue sectors.

Examples of operations

The operations are arranged after the measure they are selected for support from. The information is from 31 December 2020. In the tables the operations have been divided into category, description and project owner in order to better get an overview of the operations.

Category constitutes an appropriate categorization of the operations based on which types of operations that are common within the measure. This has usually been done based on the activity the operation holds, but in some cases the measure's span of support is so narrow that everyone has done exactly the same thing and then another factor has been used for the categorization.

The **description of the operations** is a summary of what the person who applied for the support him- och herself wrote that he or she will do. This description was written before the initiative began.

The **project owner** is the organisation or company that stands behind the application for support. Instead of printing the names of the project owners, they have been categorized based on the applicant's most characteristic features. In some cases, these categories overlap. For example universities are, with few exceptions, also government agencies. But they differ from other government agencies to such an extent that they constitute a separate category of project owners in this context.

Innovation – improved products and processes in fisheries

In the development of products and processes, only four operations have been selected for support. These are all aimed at developing products. Three of the operations are investigating how to use species that are not usually used in processed products or to increase the use of these species in processed products. One operations is investigating how to use by-products arising from fish handling.

Table 1 Examples of operations for improved products and processes in fisheries 2014–2020.

Category	Description of the operation	Project owner	Category
Use of by-products	Evaluate technologies and uses for by-products from fish handling	University	Use of by-products
Use of non-commercial species	Purchase of equipment for handling fish meat to test the suitability of various species that are rarely used in preparation	Business	Use of non-commercial species

Partnerships between scientists and fishermen

There are only two operations selected for support for partnership between scientists and fishermen. One aims to locally increase the lobster stock in the municipality and the other one focuses on method development and increased knowledge for better ecosystem-based management within the municipality.

Table 2 Examples of operations for partnerships between scientists and fishermen 2014–2020.

Category	Description of the operation	Project owner
Put out fry	Pilot activity carried by a network, where the project will produce lobster fry and release them to increase the local stock	Municipality

Promotion of human capital in fisheries

Operations for competence development has included about equal parts of operations engaged in providing or receiving education and operations engaged in networking. A total of 12 operations have been selected for support. The themes for the educations have often concerned rules in fisheries, while one operation has concerned environmental and climate work. The themes for networking have been information on environmental toxins, cooperation on fisheries management and entrepreneurship in the blue sectors. Two visits have also been carried out, both to learn more about fishing methods abroad.

Table 3 Examples of operations for promotion of human capital in fisheries 2014–2020.

Category	Description of the operation	Project owner
Provide training	Education on how authorities and businesses can contribute to achieving set environmental and climate goals, e.g. through tool development	Municipality
Provide training	Education on the new requirements for fishing vessels and their equipment, and on better safety on board	Business
Networking	Form a network that will take part in analysis of fish based on the characteristics of the fish and how much environmental toxins are in it	Industry organisation

Diversification and new forms of income

Diversification and new forms of income for fishermen is supported because the income from commercial fishing is sometimes low or unstable, and sometimes it is only a seasonal fishing that is conducted by the fisherman. However, by starting a complementary business linked to the commercial fishing, the fishermen can more easily stay in business. Of the ten operations that have been selected for support, about half are businesses that want to develop tourism activities as complementary activities, and the other half want to develop restaurant activities.

Table 4 Examples of operations for diversification and new forms of income 2014–2020.

Category	Description of the operation	Project owner
Tourism activities	Establish tourist activities through seal safaris during the winter season in addition to commercial fishing during the summer	Business
Restaurant activities	Establish a seafood restaurant using the catch for his or her own fishing as well as the catch from local fellow fishermen	Business

Temporary cessation of fishing activities

Financial compensation for when a fisherman is not able to fish was introduced in the Swedish program 2020 due to the Covid-19 outbreak that disrupted large parts of society. In 2020, 54 operations were selected for support. The median number of days compensated for temporary cessation of fishing activities is 45 days.

Table 5 Examples of operations for temporary cessation of fishing activities 2014–2020.

Category	Description of the operation	Project owner
Covid-19	Temporary cessation for 60 days	Business

Systems of allocation of fishing opportunities

In 2015, a new fisheries policy was introduced in the EU, the landing obligation. According to this, the fishermen must bring all the fish they have caught back to land, rather than throwing back the fish they do not wish to keep into the ocean. The new rules gradually came into force between 2015 and 2019, and the purpose of this measure is to support that introduction. Two operations were selected for support, one for the development of a new system and one to evaluate and apply the system.

Table 6 Examples of operations for systems of allocation of fishing opportunities 2014–2020.

Category	Description of the operation	Project owner
Development	Develop a system for allocating fishing opportunities with a transition from a landing-based to a catch-based management	State agency

Conservation measures and regional cooperation

Design and implementation of conservation measures and cooperation can be done in several ways. This may involve the design, development and monitoring of physical and administrative means to be able to carry out conservation measures in the wild, or to cooperate with other EU countries in designing and implementing these. In the Swedish program, one operation is selected for support that is an international cooperation with the focus on doing physical measures in nature, and five operations have been selected for support that concern international negotiations on the conditions for change.

Table 7 Examples of operations for conservation measures and regional cooperation 2014–2020.

Category	Description of the operation	Project owner
Physical conservation measure	Release of eel fry in Sweden in collaboration with the EU and the International Council for the Exploration of the Sea (ICES)	The county administrative board
Negotiations	Participate in EU negotiations 2016	Producer organisation

Limitation of the impact of fishing

82 operations have been selected for support to limit the impact of fishing on the marine environment and adaptation of fishing to the protection of species. Out of these operations, 20 are focused on selective gear and 57 on gear that is protected from predator attacks, where seals are mentioned as the most common threat. The most common predator-protected gear that businesses invest in are push-up traps. These are passive gear where any unwanted catch can be released alive.

Table 8 Examples of operations for the limitation of the impact of fishing 2014–2020.

Category	Description of the operation	Project owner
Limit impact of fishing on the sea bed	Buy a float trawl for fishing for herring without disturbing the sea bed	Business
Selectivity	Rebuild traps for salmon and whitefish so their meshes become larger	Business
Selectivity	Buy nets with larger meshes than the current ones, so unwanted catches are avoided	Business
Protect from mammals and birds	Renew and repair parts in old seal-proof gear	Business

Innovation linked to the conservation of marine biological resources

Innovation linked to the conservation of marine biological resources is a measure divided into two sub-measures: one concerning new technical knowledge in fisheries, and one concerning new organisational knowledge in fisheries. In technical knowledge in fishing, all operations aim to develop new fishing gear. Seven of them focus on predator protection, two on selectivity, two on investigating catch efficiency, one on developing trawls and one on developing a system to more easily find lost fishing gear. In organisational knowledge, there is only one project, and it aims to develop a strategy and action plan for more sustainable commercial fishing.

Table 9 Examples of operations for new technical knowledge in fishing 2014–2020.

Category	Description of the operation	Project owner
Selectivity	Scare away porpoises so they are not damaged in the cod fishing	University
Protect from mammals and birds	Technical and economic development of seal-proof gear	Producer organisation
Protect from mammals and birds	Develop a new passive and seal-proof gear for fishing mainly for perch, vendace and herring	University

Table 10 Examples of operations for new organisational knowledge in fishing 2014–2020.

Category	Description of the operation	Project owner
Strategy	Develop a commercial fishing strategy for ecologically, socially and economically sustainable commercial fishing, as well as an action plan with measures that will contribute to the goals of the strategy	State agency

Collection of lost fishing gear and marine litter

Most operations to collect lost fishing gear and marine litter have been run directly by professional fishermen through their companies. This includes 13 projects. Of these, all but three collections have been made in the region Scania (Skåne). Apart

from the projects run by fishermen, three projects have been run by municipalities that have hired professional fishermen and divers to carry out the collection. All of the projects run by municipalities have been carried out on the Swedish west coast.

Table 11 Examples of operations for collection of lost fishing gear and marine litter 2014–2020.

Category	Description of the operation	Project owner
Västra Götaland County	Collection of lost fishing gear in Sotenäs municipality, including fixed structures such as stone foundations, beacons and wreck sites	Municipality
Scania (Skåne)	Collection of lost fishing gear in Ystad, Trelleborg and Simrishamn municipalities	Business
Scania (Skåne)	Collection of lost fishing gear in Malmö, Trelleborg and Vellinge municipalities	Business

Restoration of marine biodiversity and protected areas

The measure is divided into two sub-measures in the Swedish programme. Both of the sub-measures apply to conservation projects, but one applies to general restoration of marine diversity and the other applies to specifically protected areas. 16 projects have been selected for support for general restoration and many of the projects are about recreating routes for fish migration that have deteriorated due to natural causes such as erosion. One project aims to demolish smaller hydropower stations that constitute obstacles to migration. Facilitating the migration of fish in this way contributes to the fish ability to reproduce. There are also projects that are directly aimed at improving the biotope where the fish reproduce, and the need for this has often arisen due to historical alternations of rivers to create naval routes. One project also aimes at investigating biological values.

Of the seven projects granted for the conservation of specifically protected areas, three are about restoring protected areas, one is a study, two are developing the management of protected areas and one is preparing for the establishment of a new protected area.

Table 12 Examples of operations for restoration of marine biodiversity 2014–2020.

Category	Description of the operation	Project owner
Fish migration route	Dig fish migration routes and make the area available for reproduction for pike in the archipelago where these have been ruined through overgrowth, erosion or land uplift	Municipality
Improving biotope	Put out five reefs of stone to give cod and lobster better conditions to find a place to live, and place out cameras to involve schools in the development	Municipality
Improving biotope	Restoration after raft cleaning by returning larger boulders, gravel and dead wood	The county administrative board

Table 13 Examples of operations for restoration of marine biodiversity in protected areas 2014–2020.

Category	Description of the operation	Project owner
Preparational work	Develop a management plan, impact assessments and other things to be able to create a new marine protected area	The county administrative board
Study	Investigate fish behaviour in and outside marine protected areas through fish tracking equipment	University

Investments that add value and product quality of caught fish

The motive for providing support for investments that increase the quality and value of wild-caught fish is to give fishermen the opportunity to get a greater return on their catch without fishing more than before. Most of the 37 investments concern the purchase of refrigeration equipment to keep the catch at good quality, investments to be able to refine their catch or to have the opportunity to sell the catch directly to consumers and thereby avoid intermediaries. Several of the investments also contain more than one of these elements.

Table 14 Examples of operations for added value and product quality of caught fish 2014–2020.

Category	Description of the operation	Project owner
Cooling system	Investment in jointly owned refrigerating building in the port, powered by solar cells	Business
Processing	Purchase of equipment for processing perch so they get skinned, filleted and vacuum-packed	Business
Processing	Build a boathouse with a jetty for processing, storage of products and for receiving customers	Business
Direct sales	Investment in a trailer for mobile fish sales	Business
Direct sales	Build a building with refrigerator, freezer and pool for storage of seafood in order to facilitate sale of products close to the landing site	Business

Fishing ports, landing sites and auction halls – for improved infrastructure

A total of 20 operations have been selected for support to improve infrastructure in ports within this measure. The operations largely concern dock reinforcements, adjustments of the sea bottom of the fishing port, protecting the fishing port against waves and cooling systems to cool down the catch after landing.

Table 15 Examples of operations for improved infrastructure in fishing ports, landing sites and auction halls 2014–2020.

Category	Description of the operation	Project owner
Dock reinforcement	Reinforcement and repair of cement dock in order to allow service cars on the dock to get closer to the fishing vessels	Association
Protection againt waves	Place out breakwater structures in connection with the the renovated dock	Municipality
Adjustment of sea bottom	Dredge the port's sea bottom so that the depth continues to be deep enough for the fishing vessels	Business
Building restoration	Restore an old auction hall and processing building to be used again	Business
Handling of catch	Build a cold room in the port and procure an ice machine	Association

Fishing ports, landing sites and auction halls – for compliance with the obligation to land all catches

Two operations have been selected for support to facilitate compliance with the obligation to land all catches, i.e. that the fisherman needs to bring all caught fish back ashore rather than throwing back the part of the catch that he or she does not want. Both of these operations concern dock reinforcements.

Table 16 Examples of operations for compliance with the obligation to land all catches in fishing ports, landing sites and auction halls 2014–2020.

Category	Description of the operation	Project owner
Dock reinforcement	Demolish an old jetty and build a new dock where trucks can drive all the way to the vessel to facilitate landings	Business